Comprehensive Review for Saudi License Examination (SLE)

By
Dr. Yahia M. Al-Khaldi

Second Edition (2010)

More than 1000 Questions & Answers

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Contents

Preface of the second edition

Saudi License Examination (SLE) is a mandatory pre-request for admission to all medical specialties under the umbrella of Saudi Commission for Health Specialties (SCHS).

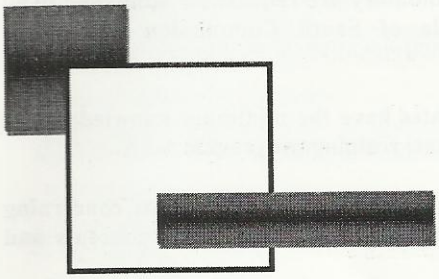
Aim of SLE is to ensure that all candidates have the minimum knowledge that makes them eligible to join any postgraduate training program in KSA.

SLE tries to assess the recall and reasoning/thinking of physicians concerning common health problems in KSA in addition to the important concepts and principles of basic and clinical sciences.

The second edition of this book consists of 13 chapters that contain more than (1000) questions covering most of signs, symptoms and diagnosis in all medical and surgical specialties followed by the correct answer and explanation. This extensive review was derived from textbooks in most of speciltyities to achieve the main objectives of SLE. In the end of the book, there is self-assessment exam which consists of 100 questions. This assessment aims to evaluate how much benefit you got from this book and to which extent you are ready for SLE.

Finally, we hope that physicians will get much benefit from this review and we welcome any comment to improve the coming editions.

Author



Chapter one

How to Pass SLE with the Highest Score?

How to pass SLE with the highest score?

1. Facts about SLE:

- SLE is designed to test the recall and reasoning competencies among health professionals including physicians.
- SLE consists of 100 questions as direct MCQs or cases scenario followed by few questions of MCQs style.
- The allowed time is two hours.
- SLE is conducted twice annually (every six month) (SCFHS announces about the SLE four months before its conduction).
- All postgraduate studies in KSA request SLE.
- SLE weighs 50% of final acceptance for all postgraduate programs.
- The Minimum passing score is 50%.

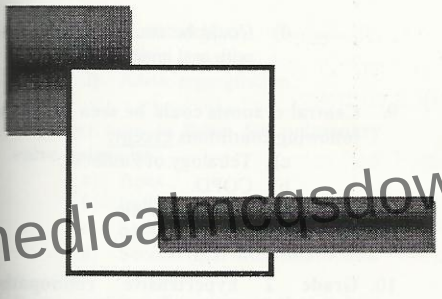
2. How to get the highest score in SLE?

- You should prepare for SLE before sitting for examination by 3-4 months.
- You should know the date, time and place of examination.
- You should fill the relevant form for exam entry (NB: delayed registration will add extra fees.
- Obtain the relevant references in the major specialties. It is preferred to have at least one reference in each field(e.g. : Kumar in internal medicine, Nelson in pediatrics, Current diagnosis and treatment in General surgery, Al-Gelban in Family & community Medicine, ABC series of ENT, EYE, Dermatology), Obstetrics and gynecology by Ten Teacher , Manual of psychiatry .
- Divide your time table to cover four months as following: three weeks for pediatrics, three weeks for obstetrics, and three weeks for surgery, four weeks for internal medicine, three weeks for family & community medicine and four weeks for sub-specialties.
- Divide each specialty to system and each system to subjects or topics.

Week	Day & Time	System	Topic
1	Sat 8-10 pm	CVS	Valvular disease
1	Sun 8-10 pm	CVS	Heart failure
1	Mon 8-10 pm	CVS	CHD
2	Sat 8-10 pm	GIT	GIT bleeding

- During reading, you should have your note-book to write the most important points about each subject (e.g. :the most important, common causes, rare findings ...etc)
- Keep the last week for revising difficult but important topics.

- Two days before examination, you should revise equations, rules (.e.g. sensitivity, positive predictive value, number need to treat, odd ratio, relative risk).
- Sleep adequately (at least seven hours) night before examination, perform Fajer prayer and take your breakfast.
- Prepare your needs for examination (pencil, pen, eraser, watch and calculator).
- Be in the examination room at least 20 minute before examination.
- Listen to the instructions, write your name & number on answer sheet.
- Go through all questions for five minutes to know the contents and length of each question.
- Read each question carefully, some questions need to be read again.
- Underline the keywords in each question (e.g. most, more, rare, except, but, least, often, diagnostic, essential, important, unlikely, pathognomonic).
- In clinical scenario, remember the settings at which the patient attends(ER, OPD, Inpatient, Family practice, Primary care).
- If questions are too long, you can start by reading the answers.
- In the case of guessing, eliminate the least correct answer (three answers, you will have two answers from which you can choose to get 50% probability of the correct answer).
- Jumping from question to question (e.g. from question 21 to question 23) may lead to lose examination if you did not jump in the answer sheet. Do not jump, you can choose your answer, put it on answer sheet and make remark on the concerned questions for review if there is time before the end of examination.
- Some answers will be either "all above", "None above". These answers may be used as distracters or to complete five items but could be the correct answer. Before choosing read the questions carefully.
- Manage your time (one minute for each question) .Remember that the shortest and the longest question will get one score. Do not waste your time in very long question unless followed by many relevant questions.
- Many candidates change their answers. If you guess the answer do not change. It is almost always true that "the first choice is the correct one".
- Most of the time, the similar answers are incorrect.
- In many questions, the longest answer is usually the correct one.
- Odd (strange) answers are usually incorrect.
- Even you know/get the correct answer you should read the other options.



Chapter Two

Clinical Background

1. **Frothy sputum suggests one of the following diseases:**
   a) Chronic bronchitis.
   b) Pulmonary edema.
   c) Bronchial asthma.
   d) Pneumonia.

2. **Causes of hemoptysis includes all the following except:**
   a) Pulmonary embolism.
   b) Mitral stenosis.
   c) Aortic stenosis.
   d) Bronchiectasis.

3. **Diplobia occurs as a result of a lesion affecting all the following nerves except:**
   a) Third cranial nerve.
   b) Fourth cranial nerve.
   c) Fifth cranial nerve.
   d) Sixth cranial nerve.

4. **Loss of angle at the base of nails is known as:**
   a) Koilonychia.
   b) Clubbing.
   c) Leukonychia.
   d) None above.

5. **Clubbing seen in all the following conditions except:**
   a) Infective endocarditis.
   b) Bronchial carcinoma.
   c) Chronic bronchitis.
   d) Liver cirrhosis.

6. **Splinter hemorrhage is common seen in:**
   a) Patients with infective endocarditis
   b) People doing manual work.
   c) Patients with chronic liver diseases.
   d) All above.

7. **The main skin lesions seen in patient with acne are:**
   a) Macules and papules.
   b) Papules and pustules.
   c) Macules and pustules.
   d) Macules and nodules.

8. **One of the following statements is false concerning Erythema nodosum :**
   a) Tender red nodules of 2-4 cm in diameter.
   b) It is usually seen in the anterior aspect of shin.
   c) Could be one manifestation of TB.
   d) Could be managed effectively with oral antibiotics.

9. **Central cyanosis could be seen in all the following conditions except:**
   a) Tetralogy of Fallot's.
   b) COPD.
   c) Core pulmonale.
   d) Left-right shunt.

10. **Grade 2 hypertensive retinopathy denote:**
    a) Narrowing arteries.
    b) Flame-shaped hemorrhage.
    c) Papilloedema.
    d) Nipping.

11. **Roth's sign is seen in patients with:**
    a) Pericarditis.
    b) Sub-acute bacterial endocarditis.
    c) Wilson disease.
    d) Micro-embolism disorders.
    e) B&D.

12. **Pitted nails are seen in patient suffering from:**
    a) Gout.
    b) Ankylosing spondylitis.
    c) Rheumatoid arthritis.
    d) Osteoarthritis.
    e) Psoriasis.

13. **Collapsing pulse is a manifestation of all the following conditions except:**
    a) Thyrotoxicosis.
    b) Severe anemia.
    c) Aortic stenosis.
    d) Arteriosclerosis.

14. **Pulsus paradoxus is defined as :**
    a) Weak pulse on inspiration.
    b) Weak pulse on expiration.
    c) Weak pulse in both limbs.
    d) No pulse in one limb.

15. **One of the following statements about pulse pressure is false:**
    a) It is wide in aortic incompetence.
    b) It is narrow in aortic stenosis.
    c) If difference is 10 mmHg, it could be normal.
    d) It is the difference between the right and left radial pulses.

16. **Tapping apex beat occurs in:**
    a) Mitral regurgitation.

b) Aortic stenosis.
c) Mitral stenosis.
d) Aortic regurgitation.

17. **The best area to listen for pulmonary valve lesions is:**
a) Apex.
b) Left axilla.
c) Second left intrcostal space.
d) Second right intercostal space.

18. **Harsh mid-systolic murmur that is best heard at the second right intercostals space and radiate to the carotid is a typical finding in:**
a) Pulmonary stenosis.
b) Aortic stenosis.
c) Mitral stenosis.
d) Tricusp stenosis.

19. **Soft pan-systolic murmur best heard at apex and radiate to axilla is a typical finding in:**
a) Pulmonary stenosis.
b) Aortic stenosis.
c) Mitral stenosis.
d) Mitral incompetence

20. **Rumbling low pitched mid-diastolic murmur that become loud after exercise is typical finding in:**
a) Pulmonary stenosis.
b) Aortic stenosis.
c) Mitral stenosis.
d) Tricusp incompetence.

21. **Pansystolic murmur is found in all the following conditions <u>except</u>:**
a) Mitral stenosis.
b) Mitral regurgitation.
c) Tricusp regurgitation.
d) Ventricular septal defect.

22. **Ejection systolic murmurs are found in all the following conditions <u>except:</u>**
a) Aortic stenosis.
b) Pulmonary stenosis.
c) Atrial septal defect.
d) Mitral stenosis.

23. **Mid-late diastolic murmurs could be found in all the following conditions <u>except:</u>**
a) Aortic incompetence.
b) Tricusp stenosis.
c) Mitral stenosis.
d) Pulmonary stenosis.

24. **One of the following is not a feature of third and fourth heart sound**
a) Both are heard at mitral area of the chest.
b) Both occur after S2.
c) Both are low pitched sound.
d) Both have underlying pathological causes most of the time.
e) S4 is unlikely to be physiological in nature.

25. **Mid-systolic click murmur is found in:**
a) Mitral stenosis.
b) Aortic stenosis.
c) Mitral prolapse.
d) Aortic incompetence.

26. **One of the following is not sign of left heart failure:**
a) Basal creps.
b) Fourth heart sound.
c) Third heart sound.
d) Pitting edema.

27. **Signs of right heart failure include of the following <u>except:</u>**
a) Raised JVP.
b) Tender and large liver.
c) Pitting edema.
d) Friction rubs.

28. **Water-hammer pulse is found in patients with :**
a) Aortic stenosis.
b) Aortic incompetence.
c) Tricusp incompetence.
d) Tricusp stenosis.

29. **Osler nodes, splenomegally and clubbing are manifestations of:**
a) Rheumatic fever.
b) Infective endocarditiis.
c) Pericarditis.
d) Rheumatic heart diseases.

30. **Aortic regurgitation is found in patients who suffer from :**
a) Down syndrome.
b) Marfan syndrome.
c) Turner syndrome.
d) Edward syndrome.

31. **One of the following is not a major criteria for diagnosis of rheumatic fever:**
a) Heart murmur.
b) Sydenham' Chorea.
c) High C-reactive protein.
d) Erythema marginatum.

32. **Manifestation of hypercapnia include all the following <u>except:</u>**
    a) Papilloedema.
    b) Warm hands.
    c) Fine tremor.
    d) Bounding pulse.

33. **Hyperresonance may occur in patients who suffer from :**
    a) Consolidation.
    b) Asthma.
    c) Pneumothorax.
    d) Lung collapse.

34. **Early sign of pneumonias in children is:**
    a) Fever.
    b) Stridor.
    c) Tachypnea.
    d) Crackles.

35. **Fine crackles are found in patients suffering from :**
    a) Heart failure.
    b) Alveolitis.
    c) Bronchiectasis.
    d) Pneumonia.
    e) A&B.

36. **Position of trachea is important to diagnose all the following conditions <u>except:</u>**
    a) Pneumothorax.
    b) Lung collapse.
    c) Consolidation.
    d) Effusion.

37. **Normal peak flow rate is:**
    a) 200-400ml/min.
    b) 300-500ml/min.
    c) 300-900 ml/min.
    d) 250-350 ml/ml

38. **Chest expansion is diminished if the patient suffers from:**
    a) Lung cancer.
    b) COPD.
    c) Pneumonia.
    d) Bronchiectasis.

39. **Pink puffers have <u>one</u> of the following features:**
    a) Thin body.
    b) Ankle edema.
    c) Brady cardia.
    d) Cyanosis

40. **Blue-bloaters have all the following features <u>but:</u>**
    a) Central cyanosis.
    b) Obesity.
    c) Ankle edema.
    d) Dyspnea.

41. **All the following respiratory conditions could have clubbing <u>but:</u>**
    a) COPD.
    b) Interstial lung diseases.
    c) Lung abscess.
    d) Lung cancers.

42. **Virchow's node could be described by all the following <u>except:</u>**
    a) It is a common feature of gastrointestinal malignancy that spread by blood.
    b) It is hard node felt in the supra-calvicular fossa.
    c) It suggests gastrointestinal malignancy.
    d) It is unlikely to be manifestation of lymphoma.

43. **The <u>most</u> common cause of abdominal swelling in adult is:**
    a) Fat.
    b) Flatus.
    c) Feaces.
    d) Fluids.

44. **Voluntary muscle spasm that occurs as a result of palpation of abdomen is known as:**
    a) Tenderness.
    b) Rebound tenderness.
    c) Guarding.
    d) Rigidity.

45. **Tender smooth enlarged liver is found in the following conditions <u>except:</u>**
    a) Alcoholic hepatitis.
    b) Infective hepatitis.
    c) Congestive heart failure.
    d) Cirrhosis.

46. **Very big spleen is a manifestation of:**
    a) Spherocytosis.
    b) Chronic myeloid leukemia.
    c) Meylofibrosis.
    d) B&C.

47. **Shifting dullness is used to assess :**
    a) Liver enlargement.
    b) Spleen enlargement.
    c) Asicites.
    d) Hydronephrosis.

48. **Large ,soft scrotal swelling which transilluminate suggest one of the following conditions:**
    a) Hydrocle.
    b) Varicocele.
    c) Tumor.
    d) Torsion.

49. **Swelling that suggest femoral hernia lies at:**
    a) Lateral to femoral artery.
    b) Medial to femoral artery.
    c) Above the femoral artery.
    d) Below the femoral artery.

50. **Silent bowel sound is found in patients with:**
    a) IBS.
    b) Bowel obstruction.
    c) Generalized peritonitis.
    d) All above.

51. **Functions of cognition include all the following <u>except:</u>**
    a) Concentration
    b) Orientation.
    c) Affection.
    d) Reasoning.

52. **Fast speech is founded in patients with:**
    a) Anxiety.
    b) Mania.
    c) Depression.
    d) Phobia.

53. **Fixed false belief without reasonable evidence is a term used for:**
    a) Hallucination.
    b) Obsession.
    c) Delusion.
    d) Illusion.

54. **False perception without a stimulus is a term used for :**
    a) Hallucination.
    b) Obsession.
    c) Delusion.
    d) Illusion.

55. **Misinterpreted perception means:**
    a) Hallucination.
    b) Obsession.
    c) Delusion.
    d) Illusion.

56. **The least common manifestation of major depression is:**
    a) Low appetite.
    b) Poor concentration.
    c) Lack of sexual interest.
    d) Weight gain.

57. **The least common manifestation of generalized anxiety disorder(GAD)is:**
    a) Sweating.
    b) Weight gain.
    c) Tachycardia.
    d) Tachypnea.

58. **The most common symptom of somatization is:**
    a) Pain.
    b) Fatigue.
    c) Loss of appetite.
    d) A&B.

59. **The commonest type of hallucination in patients exposed to intoxication is:**
    a) Visual.
    b) Auditory.
    c) Olfactory.
    d) Sensory.

60. **Normal patient who assessed for coma according to Glasgow coma scale should get:**
    a) 13 points.
    b) 14 points.
    c) 15 points.
    d) 16 points.

61. **<u>One</u> of the following is not an item of Glasgow coma scale:**
    a) Eye response.
    b) Verbal response.
    c) Motor response.
    d) Hearing response.

62. **Agnosia is defined as:**
    a) Inability to calculate.
    b) Inability to read.
    c) Inability to recognize objects.
    d) Inability to write.

63. **To ask about short term memory ,<u>one</u> of the following questions is suggested:**
    a) What is your breakfast today?
    b) What did I tell you five minutes ago?
    c) What is the important event occurred last year?
    d) None above.

64. **Small size pupils are seen in the following conditions <u>except:</u>**
    a) Old age.
    b) Alcoholics.

c) Iritis.
d) Horner syndrome.
e) Opiate users.

65. **Large size pupils are seen in the following conditions but:**
a) Third nerve palsy.
b) Horner syndrome.
c) Youth people.
d) Alcoholics.
e) Anxiety.

66. **All the following nerves are responsible for extra-ocular movement except :**
a) Optic nerve.
b) Abducent nerve.
c) Oculomotor nerve.
d) Trochlear nerve.

67. **If a patient suffers from diplopia in all directions he may have all the following conditions except:**
a) Sixth nerve palsy.
b) Third nerve palsy.
c) Thyrotoxicosis.
d) Myasthenia gravis.

68. **Ptosis could be caused by all the following except:**
a) Myasthenia gravis.
b) Third nerve palsy.
c) Horner syndrome.
d) Sixth nerve palsy.

69. **In left bell's palsy :**
a) The lower muscles are bilaterally affected.
b) The lower and upper muscles are affected ipsilaterally.
c) The upper muscles are affected ipsilaterally.
d) The lower muscles are normal ipsilaterally.

70. **Holding a vibration fork in the middle of forehead is a test that is known as:**
a) Weber's test.
b) Rinne's test.
c) Fork's test.
d) John's test.

71. **Activities of daily living(ADL) include all the following items except:**
a) Dressing.
b) Feeding.
c) Shopping.
d) Bathing.
e) Grooming.

72. **Important points that should be documented in discharge summary include all the following except:**
a) Final diagnosis.
b) Medications.
c) Differential diagnosis.
d) Prognosis.

73. **Needle for lumbar puncture should be inserted between:**
a) L2-L3.
b) L3-L4.
c) L4-L5
d) L5-S1.

74. **Inferior MI show changes in the following leads except**
a) Lead II.
b) Lead III.
c) Lead aVF.
d) Lead aV L.

75. **Causes of Bradycardia include all the following except:**
a) Hypothyroidism.
b) Athletics.
c) Nifedipine.
d) Typhoid fever.
e) Beta Blockers.

76. **Hilar Lympho-adenopathy is seen in patients suffering from all the following conditions but**
a) Sarcoidosis.
b) Lymphoma.
c) Tuberculosis.
d) Lung cancer.
e) Toxoplasmosis.

77. **Exudative pleural effusion is caused by all the following but:**
a) Bronchogenic carcinoma.
b) Pulmonary TB.
c) Pancreatitis.
d) Liver cirrhosis.
e) SLE.

78. **All the following can cause polyuria but:**
a) Diabetes insipidus.
b) Hypercalcemia.
c) Hypokalemia.
d) Cold weather.
e) Hyponatremia.

79. **One of the following is unlikely to cause vertigo:**
a) Otitis media.
b) Otitis externa.
c) Acute labyrinthitis.

d) Gentamycin.
e) Mastoditis...

80. **Acute painless vision loss is caused by all the following but:**
a) Hypotension.
b) Uveitis.
c) Retinal vein occlusion.
d) Retinal detachment.
e) Macular degeneration.

81. **Acute painful vision loss is caused by all the following but:**
a) Endophthalmitis.
b) Acute angle glaucoma.
c) Trauma.
d) Retinal artery occlusion.

82. **All the following conditions could be associated with wheezing but:**
a) COPD.
b) Croup.
c) GERD.
d) ILD.
e) Acute bronchitis.

83. **Modifiable risk factors for angina include all the following but:**
a) Family history of CHD.
b) Diabetes.
c) Hypertension.
d) High cholesterol.
e) Sedentary life.

84. **When 56 years old male patient presents to your clinic as a case of asthma, all the following questions are important to ask about except:**
a) Did he visit ER since the last visit?
b) Does he use his medication as recommended?
c) Is there any dyspnea during sleeping?
d) Were inhalers effective?

85. **Pericarditis pain is similar to MI pain, however pericarditis has the following features that distinguish it from MI except:**
a) It is aggravated with inspiration.
b) It is relived by leaning forward.
c) It is associated with friction rub.
d) It is not referred to the left arm and back.

86. **Normal blood pressure is labeled if the average of three reading was:**
a) <120/80.mmHg
b) <140/90.mmHg
c) <140/85 mmHg
d) <160/90 mmHg

87. **One of the following features does not suggest secondary hypertension:**
a) Radio-femoral pulse delay.
b) History of sweating and palpation attacks.
c) Elevated hemoglobin >18g/dl.
d) Elevated fasting blood sugar.
e) RBC cast in urine analysis.

88. **Which of the following agrees with definite diagnosis of DM:**
a) Patient whose FBS was 140 mg/dl on two occasions.
b) Patient present with polyuria and FBS was 100mg/dl
c) Patient present with polyuria and RBS was 140 mg/dl.
d) Patient has family history of DM and FBS was 110 mg/dl.

89. **Initial evaluation of 12 years old new case of DM1 should include all the following except:**
a) Urine analysis for ketones.
b) Fundoscopy.
c) Lipid profile.
d) Kidney function test

90. **The most common risk factor for skin cancer is:**
a) Sun exposure.
b) Chemo-toxic agents.
c) Nuclear radiations.
d) Exposure to X-rays.

91. **The most common affected area by basal cell carcinoma is:**
a) Face and neck.
b) Upper limbs.
c) Lower limbs.
d) Scalp.

92. **The most common type of cancer among females in KSA is:**
a) Breast cancer.
b) Thyroid cancer.
c) Leukemia.
d) Lymphoma.

93. **Risk factors for breast cancer include all the following except :**

a) Sun exposure.
b) Family history of breast cancer.
c) Early menarche.
d) Late menopause.
e) Advance age.

94. **Smoking is known to be a risk factor for all the following cancers <u>except:</u>**
a) Skin cancer.
b) Lung cancer.
c) Colon cancer.
d) Cervix cancer.
e) Gastric cancer.

95. **One of the following cancers is <u>less likely</u> to have familial origin:**
a) Breast cancer.
b) Colon cancer.
c) Leukemia.
d) Liver cancer.

96. **Ali is 34 years old found that his body mass index is 35 kg/m^2. this patient can be classified as:**
a) Overweight.
b) Moderate obese.
c) Morbid obese.
d) Mild obese.

97. **The most common cause of obesity in Saudi community is:**
a) Genetics causes.
b) Inactivity.
c) Overeating.
d) Environmental causes.

98. **The following should be done for diabetics during each visit <u>except:</u>**
a) Measuring blood pressure.
b) Measuring weight and body mass index.
c) Checking blood sugar.
d) Checking urine for albumin

99. **To ensure of good control of diabetes , HbA1C should be done <u>at least</u> :**
a) Three times/year.
b) Twice / year.
c) five times/year.
d) Once /year.

100. **Most of diabetics die as a result of:**
a) Diabetic foot and infection.
b) Coronary heart diseases.
c) Renal failure.
d) Stroke.

Answers

1-Answer: B.
Frothy sputum is characteristic of pulmonary edema while other diagnoses could be associated with rusty sputum in lobar pneumonia , chronic bronchitis is associated with white or yellowish sputum and sometimes contain blood, sputum associated with bronchial asthma is usually sticky in nature.

2-Answer: C.
There are many causes for coughing blood , respiratory diseases are the most common causes They include Tumor, TB, Pneumonias, abscess, bronchiectasis. Cardiovascular causes include pulmonary embolism, infarction, severe hypertension, mitral stenosis, left ventricular failure and erosion of aortic aneurysm. Many autoimmune diseases could be manifested with hemoptysis such as SLE, Goodpasture's syndrome ,Henoch Schonelin purpora and other types of vasculitis.Many drugs could cause coughing blood(Aspirin, and anticoagulants).

3-Answer: C
Extra-ocular muscles which are responsible for eye movements in all directions are supplied by the third ,fourth and six nerves (Superior oblique is innervated by the fourth cranial nerve (SO4) while lateral rectus (LR6) is innervated by the sixth cranial nerve, rest of ocular muscles are supplied by the third cranial nerve .Fifth cranial nerve(trigeminal nerve supplies some part of face . Any lesion affect the 3rd, 4th,6th cranial nerves could cause double vision. Other causes that could cause double vision include thyroid eye diseases, Myasthenia Gravis, orbital trauma, and cavernous sinus thrombosis .

4-Answer: B.
Looking to nails could help us in diagnosing many health problems , shape and color of nails could manifest iron deficiency anemia(spoon like shape (koilonychias), loss of angle at the base of nails is known as clubbing while white discoloration of nails is known as leukonychia (seen in liver cirrhosis).

5-Answer : C
Causes of clubbing are numerous , respiratory and cardiac causes are the commonest. Causes include (A=abscess of lung, B=bronchiectasis, C=cancer of lung , cystic fibrosis, cyanotic heart disease, Cirrhosis of liver ,celiac diseases,E=empyema of lung, F=Fibrosing alveolitis, Familial ,I= inflammatory bowel diseases),T=thyrotoxicosis.

6-Answer :B.
There are two causes for splinter hemorrhage , manual work is responsible for the majority , rare cause is infective endocarditis.

7-Answer: B.
The main features of acne are papules and pustules on the face and upper trunk, other features are cystic and nodular lesions which indicate advanced stage of acne.

8-Answer: D
Erythema nodosum is painful nodules or plaques of 2-5 cm in diameter that appear on lower extremities but can spread to thighs and arms. Systemic manifestations are common and include fatigue, fever and joints pain. In about 50% of affected individuals there is no underlying cause. Common causes include(bacterial and viral infections such as TB, Leprosy, streptococcal and Chlamydia infection.Sarcoidosis& inflammatory bowel diseases are known causes. Some drugs such as oral contraceptive pills, penicillin and sulpha could cause this lesion. Management is symptomatic and include NSAIDs , bed rest. Resistant cases could be treated by dapsone or oral steroids. There is no role for antibiotics.

9-Answer D.
There is long list of causes of central cyanosis , however left-right shunt is not included in this list .

10-Answer :D
Hypertensive retinopathy has four grades ;the first grade shows narrowing arteries, grade two is known as nipping(narrowing of veins by arteries), grade three shows flamed shaped hemorrhage and cotton wool spots , severe grade (grade-4) is papilloedema .

11-Answer : E
Roth's sign is a white centered bleeding in the retina seen in patients suffering from sub-acute bacterial endocarditis and micro-embolism disorders.

12-Answer :E
There are many manifestations for psoriasis ,nails are affected in many cases ,some of these manifestations are onycholysis and pitting nails.

13-Answer :A
Collapsing pulse is a type of abnormal pulse which found in many conditions such as severe

anemia, aortic stenosis and elderly secondary to arteriosclerosis .In thyrotoxicosis there is tachycardia or aterial fibrillation(AF) .

14-Answer :A
Pulsus paradoxus is weak or absent pulse during inspiration phase .It occurs in some conditions such as status asthmaticus,cardiac tamponade and pericarditis .

15-Answer :D
Pulse pressure is a difference between systolic and diastolic blood pressure .Wide pulse pressure is seen in aortic incompetence while narrow pulse pressure is seen in aortic stenosis , normal pulse pressure could be normal as in patient with BP=100/60 mmHg or patient whose blood pressure 140/60 mmHg. However when blood pressure is 150/40 or 95/80 mmHg we should think about the aortic incompetence and stenosis respectively.

16-Answer: C
Palpable first heart sound by hand is known as tapping heart apex. This clinical sign is found in patients with mitral stenosis .In aortic stenosis and severe hypertension the apex beat is sustained type.

17-Answer: C
Physicians can listen to pulmonary valve closure and opening by putting stethoscope on the second left intercostal space while listing to aortic valve in the second right intercostal space and for mitral valve in the fifth left intercostal space .It is important to note that this areas do not indicate the surface anatomy of the valves.

18-Answer :B
19-Answer :D
20-Answer :C
21-Answer: A
22-Answer: D
23-Answer: D
24-Answer :D
25-Answer :C

Comments on questions 17-25
Normally there are two heart sounds ;first and second ,the first sound(S1) occurs when the mitral and tricuspid valve close while second heart sound (S2) occurs when aortic and pulmonary valves close. .First sound(S1) is low pitched compared to S2 (Lubb vs dup sound), time from S1 to S2 is systole time while time between S2 and S1 is diastole time . S3 and S4 are extra heart sounds that occur after S2 , both are low pitched and heard at mitrale area. S3 is usually physiological in nature while S4 is pathological, the most common pathological cause of S3 is left ventricular failure ,however it could be normally if found in young people and pregnant ladies, other causes include mitrale and aortic regurgitation.Fourth heart sound is almost always pathological , it occur just before S1 ,it occurs as a result of many conditions such as aortic valve stenosis, congestive heart failure,hypertension & hypertrophic obstructive cardiomyopathy.Loud S1 occurs in mitral stenosis while soft S1 occurs in Mitral regurgitation, soft S2 occurs in calcified aortic stenosis.Murmurs are abnormal sound that results from turbulent of blood flow in the heart.Murmurs are classified according to phase that they appear in as systolic or diastolic. According to their loudness they can graded to six grades ; grade—1: just audible while patient breath held , grade -5 very loud and grade -6 could be heard without stethoscope . Murmur can extend during systole(Pansystolic) as in mitral or tricuspid regurgitation(MR)(TR) and ventricular septal defect(VSD). Late systolic murmurs occur in mitral valve prolapse (MVP) and coarction of aorta. Early diastolic murmurs occur in aortic and pulmonary regurgitation (AR)(PR). Midlate diastolic murmur occurs in Mitral and tricuspid stenosis(MS)(TS) and aortic incompetence .

26-Answer: D.
27-Answer: D.
Signs of left heart failure include: basal crackles, tachy cardia, tachypnea, third and fourth heart sounds . Signs of right heart failure include raised JVP, parasternal heave, ,S3, sacral and ankle pitting edema, tender and enlarged liver.

28-Answer: B.
Water-hammer pulse is one feature of aortic incompetence, other feature is wide pulse pressure.Early diastolic and ejection systolic murmurs could be found .

29-Answer: B.
Other manifestations of infective endo-carditis include: fever, fatigue, anemia, murmurs.The most common causative organism is Streptococcus viridans .

30-Answer: B.
Many syndromes can be manifested by cardiac murmurs .Those syndromes include Down's syndrome(VSD), Marfan's syndrome(Aortic regurgitation), Turner's syndrome (coarctation of aorta).

31-Answer: C.

Major criteria of rheumatic fever include : heart murmurs(mitral and aortic regurgitation),fleeting poly-arthritis affecting large joints(knees, ankles, elbows), skin manifestations which include(erythema marginatum, nodosum and subcutaneous nodules over tendons or joints), Sydenham's chorea(spasmodic , uncomfortable jerky unintentional movements of limbs and or tongues). Fever , joints pain and C-reactive protein are minor criteria of rheumatic fever.

32-Answer: C
High carbon dioxide in the blood (hypercapnia) results from respiratory failure for many causes. Its clinical features include confusion, drowsiness, warm hands, coarse tremor, dilated veins, paplloedema, small pupils size and bounding pulse.

33-Answer : C.
Resonance is the finding in normal human beings, bronchial asthmatics, and patient suffering from chronic obstructive diseases or interstitial lung disorders.Hyper-resonance is found if the patient suffer from pneumo-thorax . In the case of consolidation , lung collapse and pleural effusion the typical finding is dullness.

34-Answer: C
In children, pneumonia presents with fever, cough and dyspnea , feeding refusal and sleep disturbance. The early sensitive sign of bronchopneumonia is fast breathing(tachypnea). Nasal flaring, cyanosis, and crackles are late manifestations in children. Stridor is a sign seen in children suffering from viral croup or epiglotitis.

35-Answer: D.
There are two main types of crackles that could be heard during auscultation of chest; fine crackles which could be found in patient with congestive heart failure(pulmonary edema) and fibrosing alveolitis . Coarse crackles is found in patients with bronchiectasis .In pneumonia the sound heard is known as bronchial breathing.

36-Answer: C.
In normal individuals the trachea is centrally located. In some lung diseases, its position may be affected ; in lung collapse trachea will be pulled towards the same direction of pathology while in the pleural effusion and tension pneumothorax the trachea will be pushed to the other side .In consolidation ,bronchial asthma and COPD the trachea is centrally located.

37-Answer: B
Peak flow meter is an easy tool to measure the degree of airways obstruction in office or clinic . There are many types of this instrument . It could be used to diagnose or to measure the effect of bronchodilators on bronchial tree as in bronchial asthma. In normal people (peak flow ranges between 300-500 ml/min).

38-Answer: B.
Chest expands during inspiration. Full expansion from the beginning of inspiration to the end of expiration should be more than 5 centimeters. Chest expansion is reduced in some condition such as chronic obstructive lung diseases.

39-Answer: A
40-Answer: D

Comments on Q 39-40:
Patients with chronic obstructive lung diseases could be classified into two main categories. Those with thin body built , acyanotic ,non-edamatous, and not dyspneic are known as Pink Puffer ,while those with cyanosis, obese, ankle edema but not dyspnoeic are known as Blue Bloater.

41-Answer: A
Clubbing is enlargement the of the connective tissue in the terminal phalanges of the digits. There are many respiratory , cardiac and gastrointestinal causes for this condition. Pulmonary causes include: abscess, bronchi-ectasis, cancer, empyema and fibrosis.

42-Answer: A.
Virchow's node is a hard node that associated with upper gut malignancy and spreads by lymph or thoracic duct . It is felt in the left supra-clavicular fossa .It is unlikely to be associated with lymphoma or leukemia.

43-Answer: A.
There are many causes for abdominal swelling, they could be classified as due to organ enlargement or due to accumulation of fat, fluid , air or feces . However, the most common cause among all these is fat as more than 40% of population have overweight or obesity.

44-Answer: C.
We use some terms to describe reaction towards abdominal examination; tenderness is feeling of pain when examiner touches or palpates , rebound tenderness occurs due to movement of inflamed organ of peritonitis against parietal peritoneum. Guarding is muscular contraction(spasm) that takes place voluntary to protect the underlying tissues from pain while

rigidity is an involuntary spasm of muscle that occurs as a reflex reaction in generalized peritonitis.

45-Answer: D.
Consistency of liver is paramount in reaching diagnosis , tenderness is present if there is congestion as in CHF or inflammation as in hepatitis. In liver cirrhosis the liver is shrunken with firm and smooth consistency without tenderness. In liver malignancy the size of liver is enlarged ,consistency is hard, the outline is irregular without tenderness

46-Answer: C.
Enlarged spleen is seen in many conditions (infectious,autoimmune,malignancies,genetic,and inflammatory disorders. Size of spleen is very helpful to know the underlying causes. Malaria, brucellosis,bilharziasis,leishmanasis , hepatitis, glandular fever, and bacterial endocarditis are known infectious cause of enlarged spleen .Portal hypertension could be manifested by splenomegaly.Most of malignancies are associated with splenomegaly,however meylofibrosis is associated with the biggest spleen in oncology. Hemolytic anemia, amyloidosis , Gaucher's disease and Felty syndrome are known conditions to be associated with splenomegaly also.

47-Answer: C.
When there is generalized abdomen swelling , we should consider abdominal fluid .To distinguish fluid from other swelling we ask the patient to lie on one side and mark the maximum level of dullness and then ask the patient to roll to the other side and observe if the level of dullness shift (shifting dullness) , if this was positive the patient most likely to have ascites.

48-Answer: A
Differential diagnosis of scrotal mass include many conditions such as tumor, hydrocele , varicocele, cysts , torsion or infections. The last two conditions are painful and progress quickly. Tumor is painless , progresses slowly, hard in nature. Varicocele is look like bag of worms and changes with position. Large and soft swelling that illuminates is most likely to be hydrocele or epididymal cyst .

49-Answer: B
Anatomical land marks are very important to differentiate between different types of masses in the inguinal area . Of theses land marks is femoral artery that can be identified through its pulse. Femoral hernia is swelling found in groin crease medial to the femoral artery. To know the types of hernia you should identify pubic tubercle, if the neck of hernial sac is Superior and Medial to ,it is indirect inguinal hernia , (SMI) , if it is Lateral and Inferior to it is femoral hernia(LIF).

50-Answer: C
Absent bowel sound is a characteristic of peritonitis , other signs include: guarding and rebound tenderness, in intestinal obstruction there is loud bowel sounds. In irritable bowel syndrome(IBS), the bowel sound is normal in most of patients.

51-Answer: C
Mental status examination is vital in all patients. It includes many items such as behavior, mood, appearance, speech, thinking, perception, belief ,and cognition. During evaluation of cognition you should test(concentration, short and long memory, orientation to time ,place and person, reasoning and critical thinking). Affection is not considered as an item of cognition .

52-Answer : B
General observation of patient can give important clues about diagnosis.In patients with depression ,they show slow activity, in patients with anxiety they show tense appearance, in patients with mania they show fast speaking.

53-Answer : C.
54-Answer : A
55-Answer : D
Comments on Questions No. 53-55 :
As practitioner ,we should be familiar with common term used in psychiatry .These include either false perception or belief .Illusion could be defined as misinterpretation of perception , delusion is defined as fixed false belief without reasonable evidence , and hallucination could be defined as false perception without realistic stimuli. All these symptoms indicate serious psychiatric conditions such as psychosis ,schizophrenia and mania .

56-Answer: D
Criteria for diagnosis major depression include at least five symptoms out of the following for two consecutive weeks: low mood, lack of interest in usual activities, poor concentration , poor appetite, insomnia, fatigue, psychomotor retardation and suicidal ideation . Even weight changes could occurs, it is least likely to be a common manifestation of major depression.

57-Answer: B.
Generalized Anxiety disorder(GAD) is characterized by excessive worry that associated

with at least three of the following symptoms most of the days during the past six months: restlessness, irritability, easy fatigability, difficulty to concentrate , muscular tension and sleep disturbance .During attacks GAD could be associated with sweating , fast heart rate and respiratory rate. Weight changes is not known to manifest GAD except in the case of presence of underlying cause such as hyperthyroidism .

58-Answer: A
Somatization is feeling of symptoms without any underlying organic cause , the most common complaints are pain and fatigue .Somatization is usually associated with other psychiatric disorders such as depression, anxiety and substance abuse. Looking for these disorders is necessary before labeling g the patient to have somatization.

59-Answer : A.
Intoxicated patients present with drowsiness, lack of concentration.Needles marks could be observed over some parts of their bodies. Smells of alcohol or glue could be found at presentation. Visual hallucination is another manifestation of intoxication, while auditory type is seen in patients with schizophrenia.

60-Answer: B.
Glasgow Coma Scale(GCS) is used to assess the level of consciousness. It consists of three elements: Eye opening(4 points), Verbal response(5 points), Motor response(5 points) (E4V5M5), the maximum score is 14 points.

61-Answer: D.

62-Answer: C.
There are many terms used by neurologists to describe defect in reading or writing skills .They include: dysgraphia(inability to write), dyslexia(difficulty to read),acalculia(inability to calculate), agnosia(inability to recognize objects).

63-Answer: A.
There are four types of memory; immediate , short, long and new .In the immediate one person can tell you what you said immediately , in short term memory the person can tell you what he took in his breakfast (within 24 hours), in new type, the person can recall and tell within few minutes while in long term memory the person can recall what occurred many years ago.

64-Answer: B
65-Answer: B
Comments on question64-65.
Size of pupils is helps clinicians to get the right diagnosis,they should be familiar with the commonest conditions associated with small pupils such as(old age, opiate user, Horner's syndrome, iritis , use of pilocarpine and Argyll Robertson pupils).Large pupils could be seen in patients use alcohol, anxious people, third nerve palsy, trauma and in persons on atropine or atropine like substances.

66-Answer: A.
Eye is supplied by the second, third, fourth and sixth cranial nerves .Vision is the responsibility of the optic nerve while eyes movments is the function of the third, fourth and sixth cranial nerves which supply the extra-occular muscles.

67-Answer :A.
Lesions in the nerves supplying ocular muscles could cause double vision either in specific direction as (IV palsy cause double vision when look down or inward),(VI palsy can cause diplopia when looking to side of lesion , when patient has diplopia in all direction he may have third nerve palsy, thyroid eye disease or myasthenia gravis.

68-Answer :D
Dropping of upper eyelid is known as ptosis. Ptosis is seen in many systemic and local eye diseases such as Myasthenia gravis, Horner syndrome, Diabetes Mellitus, third nerve palsy or lid swelling .Six and fourth cranial nerves do not supply eyelid muscles so their palsy never cause ptosis.

69-Answer: B
Facial nerve(VII cranial nerve) supplies facial expression muscles (muscles responsible for eye closure, raising eyebrows) .In lower motor lesion such as Bell's palsy all muscles in the same side will be affected leading to widened palpebral fissure, weak blink and drooped mouth (affect upper and lower part of face).In the upper motor neuron lesion, the lower muscles are affected (i.e mouth will drop while eyebrows raise). This occurs as the upper half of face is bilaterally innervated.

70-Answer: A.
To test for hearing we use two tests; Weber's test and Rinne' s test. Rinne's test is carried out by placing vibrating tuning fork on the mastoid till there was no more sound and then place it at the auditory opening (If still heard ,the air conduction is better than bone conduction and this finding either normal or auditory nerve lesion). In Weber test the vibrating tuning fork is placed in the middle of the forehead . If sound is

heard on one side , there is conductive deafness in the that side or there is sensori-neural deafness in the opposite side.

71-Answer: C.
Activities of daily living(ADL) is one tool of assessing the current state of individuals. Their elements include: ability to defecate and urinate, grooming, ability to use toilet, feeding, dressing, bathing, walking, using stair. Shopping, using telephone, doing laundry, managing money, preparing daily meals are known as element of instrumental activities of daily living(IADL). .

72-Answer: C
Discharge summary gives brief account about the patient when he/she was in the hospital concerning many issues; diagnosis, progress ,used drugs, important results of relevant investigations and referral. Non-pharmacological advice and next appointment are two elements of discharge summary. Differential diagnosis is not an element of discharge summary. Discharge summary should be writtend and signed by the treating doctors.

73-Answer: B.
Lumbar puncture is done to obtain cerebrospinal fluid from the sub-arachnoid space by inserting a needle through dura matter between the third and fourth lumbar vertebrae .

74-Answer: D.
Inferior MI leads to some changes in lead II,III, and aVF. Lateral MI shows changes in lead aVL and I,while anterior MI shows changes in V1-V6.

75-Answer: C.
There are many causes for sinus bradycardia(pulse<60beat /minute).These causes include raised intracranial pressure, biliary colic, dental pain, glaucoma, hypothyroidism, athletics, typhoid fever , beta-blockers, MI, and heart block for any reason.

76-Answer :E.
Hilar lympho-adenopathy could be seen in some situations such as: bronchogenic carcinoma, sarcodosis, lymphoma, TB, AIDS. Toxoplasmosis is not associated with hilar lymphoadenopathy.

77-Answer: D.
Pleural effusion is caused by many causes , however, we can classify it into two major classes according to the concentration of protein: exudates(protein> 30 g/l) , transudate(protein < 30 g/l) .Causes of pleural effusion giving transudate are: heart failure, liver cirrhosis, ,nephrotic syndrome, Meig, syndrome and other hypoalbuminemia causes. Causes of exudates could be classified either to infectious such as TB, pneumonia or tumor or auto-immune diseases such as(SLE, RA), and others such as pancreatitis, asbestos exposure.

78-Answer: E.
There are many cause of excessive urination which include: Diabetes mellitus, diabetes insipidus, hypercalcemia, hypokalemia, ,diuretic phase of acute renal failure, primary polydipsia, diuretics, caffeine, alcohol, lithium, sickle cell disease, chronic peylonephritis and cold weather.

79- Answer: B.
Vertigo could be caused by either ear or nervous system causes. Ear causes include: otitis media, mastoditis, labyrinnthitis, vestibular neuritis, benign positional vertigo, Menier's disease, , acoustic neuroma, ,lesions of the 8th cranial nerve, meningoma, metastic carcinoma and ototoxic drugs.Central nervous system causes include:vertebrobasilar artery insufficiency, posterior fossa brain tumors, Cerebrovascular accidents and basilar migraine. External ear problems are unlikely to cause vertigo.

80-Answer: A.
Causes of acute painless vision loss are many and include: retinal artery and vein occlusion, hypotension,retinal detachment, exudative retinal degeration, ischemic optic neuropathy, vitreous bleeding , anxiety and somatization or factious disorders.

81-Answer: D
Painful visual loss could be caused by: acute angle,optic neuritis,glaucoma ,corneal ulcer, uveitis, endophthalmaitis,trauma, factious and somatization.

82-Answer: B.
Causes of wheezing are several and most of them are due to respiratory pathology. They include :Asthma, COPD, interstitial lung disease, bronchitis, bronchiloitis, , foreign body, chest infection, anaphylaxis, neoplasm, congenital anomalies, pulmonary embolism, epiglotitis, and gastroesophageal reflux .Croup causes stridor which is inspiratory sound and usually affects young children as a result of inflammation of upper airways mainly larynx and trachea .

83-Answer: A
Risk factors for coronary heart diseases (CHD)are multiple. They could be classified into two groups: Modifiable such as smoking, hypertension, diabetes, dyslipidemia and

sedentary life and non-modifiable factors such as: age, sex, family history of CHD.

84-Answer: D.
In patients suffering from asthma they should be assessed at each visit regarding the asthma control which should cover the following areas: severity of diseases that could be evaluated by asking about frequency of using PRN inhaler, night cough or wheeze, visiting emergency department as a result of severe attack , other questions that should be asked include: compliance to recommended medications prescribed by the treating doctors. Effectiveness of medication can not be assessed by direct question in such condition, however it could be assessed by ability to control symptoms.

85-Answer: D
Pericarditis and myocardial infarction presented as acute chest pain , both are similar in many features . However, pericaritis is classically manifested with acute chest pain that aggravated with inspiration and relived by sitting up and leaning forwards, the pain is pleuritic in nature , pericardial rub could be heard over the anterior aspect of chest , pain of pericarditis could radiate to arm and back. ECG will show ST segment elevation (concave upwards and it involves most of leads).

86-Answer: A.
According to JNC VII, blood pressure could be classified into the following categories in individuals>=18years old :Normal <120/80mmHg, Pre-hypertension(120-139/80-89mmHg, Stage I HTN(140-159/90-99 mmHg, Stage II HTN(>159/99 mmHg).

87-Answer : D.
Secondary hypertension is rare and represents less than (10%), most of patients with secondary hypertension have underlying renal diseases. Cardiac cause of secondary HTN are rare and include coarctation of aorta which is manifested with radio-femoral pulse delay.Endocrine causes are rare and include(cushing syndrome, oral contraceptive use, primary aldosteronism, , pheochromocytoma and hyperparathyroidism. Polycystic renal diseases can cause high hemoglobin. Sweating and palpitation are features of pheochromocytoma ,while RBC cast in urine is a feature of glomerulonephritis . Even some time HTN and diabetes associate each other , diabetes is not direct cause of HTN.

88-Answer: A.
Diabetes is defined as a heterogeneous syndrome characterized by chronic hyperglycemia that occurs due either relative or absolute deficiency of insulin either due to destruction of Beta cells by viruses or secondary to autoimmune diseases. Diagnosis of DM could be confirmed if the patient present with classical symptoms of DM(polyuria,polydypsia and weight loss) plus fasting plasma glucose >125 mg/dl or random plasma glucose >=200mg . Or two consecutive reading of fasting plasma glucose(>125 mg/dl) or random plasma glucose(>= 200mg/dl).

89-Answer: B.
In DM1 , the patients should be evaluated at diagnosis comprehensively , to include lipid profile, urine analysis, urea, creatinine. Fundoscopy is recommended to be done after five years of initial diagnosis and then annually. In DM2 , patient should be evaluated by direct fundoscopy as many patients with this type of disease have diabetic retinopathy which develop as a result of pre-diagnosis asymptomatic DM.

90-Answer: A
The main three types of skin cancer are basal cell carcinoma, squamous cell carcinoma and melanoma. Different types of radiation are known risk factors for skin cancer, however, sun exposure is the strongest risk factor for basal and squamous cell carcinoma .

91-Answer: A.
Basal cell carcinoma (BCC)could affect any part of the body, however the face and the neck are the most common affected area of the body, it rarely affect scalp or lip , it is the most common skin cancer(60%) , followed by squamous cell carcinoma(SCC)(20%) and melanoma(1%) of total skin cancers.

92-Answer: A.
According to Gulf Center for Cancer Registration Report (1998-2002), there were (14694 cases) of different type of cancers reported among female in KSA. The most common cancer affecting females is breast cancer (20%), followed by thyroid gland cancer(9.6%),lymphoma(9.2%),Leukemia(7.3%),Colorectal cancer(6.7%), and cervical cancer(5.9%).

93-Answer: A.
Risk factors of breast cancer are several and include: early menarche(before 12 years old) , late menopause(after 55 years old), family history of breast cancer, first child after 30 years, nulli-parity, short or no breast-feeding, obesity, long term use of HRT, exposure to ionizing radiation.

94-Answer :A

Smoking is known to be a risk factor for most cancers affecting the human being , however it is not known to be a risk factor for skin cancer .

95-Answer: D.
There are many types of cancer which are known to be familial ; those include: breast, colon, blood, melanoma, retinoblastoma, multiple endocrine neoplasia type-1 and type-2, neurofibromatosis, renal cell carcinoma, and Wilms tumor.

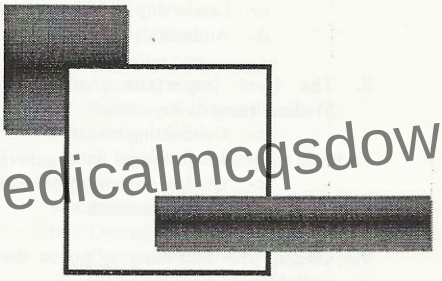
96-Answer: B.
According to body mass index (BMI) , any subject could be classifies as underweight (BMI< 18), normal(BMI=18-24.9), overweight(BMI=25-29.9), Mild obesity (BMI= 30-34.9), moderate obese(BMI= 35-39.9), severe or morbid obesity(BMI>40).

97-Answer: C.
Although, obesity are multi-factorial in etiology , high calories intake remains the most underlying cause of overweight and obesity among Saudis followed by lack of practicing physical activity(sedentary life).

98-Answer: D
In diabetic patients there are many procedures that should be carried out every visit, these include measuring blood pressure and body weight , checking feet, assessment compliance and testing plasma sugar, checking for albumin is recommended to be done twice per year if baseline urine analysis was normal.

99-Answer: B
In diabetic patient with good control (FPG<126 mg/dl), the HbA1c is recommended to be carried out every six months, for those with poor control , it is recommended to be done every two-three months.

100-Answer: B.
About three-quarter of diabetic die due to coronary heart diseases, diabetics have 2- 5 risk of getting MI compared to normal subjects.



Chapter Three

Family & Community Medicine

1. **Dr. Ali came to you complaining that he was on call as seven calls per month for the last three years and he wanted to take a vacation for three months .Mean of calls per year that was taken by him was:**
   a- 86 calls.
   b- 84 calls.
   c- 7 calls.
   d- 252 calls.

2. **The most common used central tendency measure/s in medical practice is/are:**
   a- Mean and SD.
   b- Mean.
   c- Median.
   d- All above.

3. **Normal distribution curve could be described by one of the following:**
   a- It is skewed to left.
   b- It is skewed to right.
   c- It looks like inverted bell shape.
   d- It has more than one mode.

4. **Hassan is a resident in the third year of family medicine training program. He consulted statician concerning the appropriate test when he wants to compare the mean of cholesterol among males and female in his village . statician would advise him to use:**
   a- Chi-square test.
   b- Anova test.
   c- Student –t-test.
   d- McNamara test.

5. **Dispersion of values around the mean is known as:**
   a- Range.
   b- Mode.
   c- Standard deviation.
   d- Standard error of the mean(SEM)

6. **A cyclic and systematic process which deals with performance in medical practice is known as:**
   a- Quality assurance.
   b- Quality control.
   c- Audit.
   d- Total quality management(TQM).

7. **The least important factor contributing to improvement the quality of health services is:**
   a- Teamwork.
   b- Incentives.
   c- Leadership.
   d- Authority .

8. **The least important advantage of Medical records is:**
   a- Conducting research.
   b- Medico-legal issues.
   c- Quality improvement .
   d- Team coordination.

9. **One of the following is not a discrete variable:**
   a- Respiratory rate.
   b- Pulse.
   c- Size of family.
   d- Weight of child.

10. **Integration of the best research results and experience with patient's values in your daily clinical practice in order to improve the quality of health services is known as:**
    a- Medical education.
    b- Health education.
    c- Health promotion.
    d- Evidence Based Practice.

11. **The strongest clinical evidence is obtained from:**
    a- Randomized control trials(RCT).
    b- Retrospective studies .
    c- Prospective studies.
    d- Meta-analysis.

12. **The most important risk factors for developing osteoporosis is:**
    a- Obesity.
    b- Sedentary life.
    c- Age.
    d- Smoking.

13. **One of the following is not a risk factor for Coronary heart diseases(CHD):**
    a- High HDL.
    b- High LDL.
    c- Smoking.
    d- DM.
    e- Age.

14. **One of the following cancers is not associated with cigarette smoking:**
    a- Esophagus cancer.
    b- Liver cancer.
    c- Bladder cancer.
    d- Larynx cancer.

15. **Ability of test to identify those patients who have DM is:**
    a- Specific test.
    b- Sensitive test.
    c- Accurate test.
    d- Sensitive and specific test.

16. **Advatages of sampling include all the following but:**
    a- Decrease cost.
    b- Decrease effort.
    c- Decrease the size of population under the study .
    d- Increase bias.

17. **The predictive values of the test is affected by:**
    a- Test sensitivity .
    b- Test specificity .
    c- Test accuracy.
    d- Prevalence of the disease.
    e- None above.

18. **The most common cause of mortality among young people in KSA is:**
    a- Infections.
    b- Road Traffic accidents(RTA).
    c- Coronary heart diseases.
    d- Malignancy.

19. **According to the last national epidemiological studies on DM in KSA , the prevalence of DM is about:**
    a- 12%.
    b- 5%.
    c- 23%
    d- 30%.

20. **Which one of the following is <u>false</u> concerning Acute Respiratory Infections in KSA:**
    a- Most of cases are caused by viruses.
    b- Most of cases are treated by antibiotics.
    c- Most of cases are self-limited.
    d- Most of patient have less than six attacks per year.

21. **Life styles changes play important roles in preventing all the following diseases <u>except</u>:**
    a- CVD.
    b- COPD.
    c- TB.
    d- Cancer.

22. **The most common three risk factors contribute to premature death from Coronary heart diseases(CHD) are:**
    a- Smoking, HTN, dyslipidemia
    b- Dyslipidemia, DM, HTN.
    c- Inactivity, DM, Smoking.
    d- HTN, Stress, inactivity.

23. **Which one of the following is true about the smoker in comparison to non-smoker?**
    a- Two-folds increase in MI.
    b- Two-folds increase in COPD.
    c- Two-folds increase in lung cancer.
    d- Two-folds increase in bladder cancer.

24. **The most important risk factor predisposing an individual for peripheral vascular diseases is:**
    a- Diabetes Mellitus.
    b- Hypertension.
    c- Smoking.
    d- Dyslipidemia.

You conducted mammography to screen for breast cancer , the following table shows the data of the screening test.

Result of the test	Present of breast cancer		Total
	Yes	No	
Positive	15	22	37
Negative	13	25	38
Total	28	47	75

25. **The sensitivity of the mammography is:**
    a- 54%.
    b- 41%
    c- 20%
    d- 39%.

26. **The positive predictive value would be :**
    a- 54%.
    b- 41%
    c- 20%
    d- 39%.

A cohort study of a chicken pox outbreak in a school obtained the following data:

Exposed at school	chicken pox		Total
	Yes	No	
Yes	21	453	474
No	49	1307	1356
Total	70	1760	1830

27. **The relative risk of chicken pox will be:**
    a- 3.2
    b- 2.2
    c- 1.2
    d- 4.2

28. **The incidence of chicken pox is :**
    a- 3.8%
    b- 44%
    c- 3.6%
    d- 4%

29. **Which one of the following statements about Viral Hepatitis in KSA is <u>false:</u>**
    a- Hepatitis- B is the most common type of hepatitis in KSA.
    b- Hepatitis-A affect children more than adults.
    c- Most of hepatitis-B cases are reported among adults.
    d- All types of Hepatitis affect both sex equally .

30. **The <u>most</u> common symptom of brucellosis is:**
    a- Headache.
    b- Joint pain.
    c- Fever.
    d- Night sweating.

31. **The <u>most</u> significant risk factor for fall in elderly is :**
    a- Drug use.
    b- Postural hypotension.
    c- Visual impairment.
    d- Impaired gait and balance.

32. **The <u>most</u> common gastrointestinal symptom in elderly is:**
    a- Vomiting.
    b- Dyspepsia.
    c- Constipation.
    d- Diarrhea.
    e- Flatulence.

33. **The elderly in Saudi Arabia represent about(%)of the total population:**
    a- 10%.
    b- 1%.
    c- 5%.
    d- 7%.
    e- 15%.

34. **All the following are primary preventive measures <u>except:</u>**
    a- Immunization.
    b- Exercise.
    c- Intake low fat diet.
    d- Use of seat belt.
    e- Annual check up of blood pressure.

35. **One of the following factors <u>is not</u> established to be a risk for atherosclerosis:**
    a- Diabetes Mellitus.
    b- Hypertension.
    c- High Triglyceride.
    d- High HDL.
    e- Sedentary life.

36. **The least important item to be included in Periodic Health Maintenance(PHM) in Saudi Arabian individuals is:**
    a- Family history of premature cardiac death.
    b- Practicing regular exercise.
    c- History of smoking.
    d- Occupational hazards.
    e- Marital conflicts.

37. **A 40 years old Saudi Male presented to your primary health care center(family Practice Center) asking for Periodic Health Maintenance . Which one of the following is <u>not important</u> to be done for this person:**
    a- Asking for total cholesterol.
    b- Asking for CBC.
    c- Asking for fasting Blood sugar.
    d- Measuring blood pressure .
    e- Measuring Body Mass Index(BMI).

38. **A 50 years old Saudi lady present to your clinic asking for PHM. Which of the following is not recommended to be done for her in this visit?**
    a- Total Cholesterol.
    b- Fasting blood sugar.
    c- Mammography.
    d- Pap smear.
    e- Hepatitis-B serology.

39. **All the results of the above lady were normal. However you asked her to come back after one year to:**
    a- Check her blood pressure.
    b- Check her cholesterol.
    c- Check her CBC.
    d- Check her fasting blood sugar.
    e- Examine her breasts.

40. **A six months old infant presented to you as routine well baby care . Which one of**

the following is not recommended to be done for him at this age?

a- Testing for congenital hip dislocation(CDH).
b- Testing for cryptoorchidism.
c- Testing for hearing.
d- Checking weight, height.
e- Testing radio-femoral delay.

41. Testing for radio-femoral delay is recommended to be done at:

a- Six months.
b- Birth.
c- Two months.
d- Four months.
e- b&c.

42. Diphtheria and Tetanus(DT) booster doses should be given for adults every:

a- Two years.
b- Five years.
c- Fifteen years.
d- Ten years.
e- Other year.

43. Varicella vaccine in childhood should be given at:

a- 9-11 month.
b- 5-6 months.
c- 3-4 months.
d- 0-2 months.
e- 12-15 month .

44. <u>One</u> of the following vaccines could be given to HIV positive subjects :

a- Oral typhoid vaccine.
b- BCG vaccine
c- Varicella vaccine
d- Hepatitis-A.
e- Oral polio.

45. Which of the following statements is false about Rotavirus vaccine?

a- It is live oral vaccine
b- It consist of three doses series.
c- The first dose is given between 6-12 weeks of age.
d- Intussusceptions is reported in Rotavirus pentavalent vaccine.
e- Hospitalization and emergency visits for rotavirus gastroenteritis will be decreased by about 90%.

46. Individuals who are allergic to egg should not be given:

a- DPT.
b- Influenza vaccine.
c- H. Influenza vaccine.
d- Hepatitis-B vaccine.

47. Most of vaccine should be stored at:

a- 0-2 C.
b- 2-8 C.
c- 0-8 C.
d- 0-10 C.

48. Hepatitis-A vaccine is recommended for the following groups <u>except:</u>

a- Travelers to high risk areas .
b- Lab. Staff who work directly with the virus.
c- Resident of homes of those with severe learning difficulties.
d- Hemophelic patients treated with factor VIII.

49. <u>One</u> of the following serotypes of meningitis has not a vaccine:

a- Group –A.
b- Group-C.
c- Group-W135.
d- Group-B
e- Group-Y

50. Hepatitis- B Immunoglobulin could be given to all the following groups <u>except:</u>

a- Mothers of infants of + HBSAg.
b- Infant of mothers of + HBSAg.
c- Those exposed to accidental inoculated with Hepatitis-B virus.
d- Lab. Technicians.

51. A 4 Months old baby presented to PHCC for DPT &OPV (second dose) , his mother told you that he suffered from diarrhea and vomiting for the last 2 days. He looked well with mild dehydration and he tolerated oral intake. Your action would be:

a- Giving ORS , discharge him, give appointment within 48 hours.
b- Giving DPT,OPV,ORS, discharge the patient and repeat dose within 4-6 weeks.
c- Giving ORS, DPT&OPV and discharge him.
d- Giving ORS, DPT and Injectable polio vaccine , give appointment within 48 hours.

52. Contraindications to MMR vaccine include all the following <u>except:</u>

a- Thrombocytopenia .
b- Pregnancy .
c- Allergy to Neomycin.

d- Allergy to Penicillin-V.

53. **All the following are considered in vital statistics <u>except:</u>**
    a- Birth.
    b- Death.
    c- Divorce.
    d- Marriage.
    e- Separation.

54. **Systamatic collection, analysis and dissemination of diseases data pertaining to groups of population is known as :**
    a- Epidemiology.
    b- Biostatistics .
    c- Survey.
    d- Surveillance.
    e- Proposal.

55. **One of the following is not a component of epidemiological triangle :**
    a- Agent.
    b- Host.
    c- Reservoir
    d- Environment.

56. **An example of leading question is:**
    a- Tell me about your pain.
    b- Is the pain so severe?
    c- How many pain attacks did you get?
    d- Where is the pain?

57. **The <u>most</u> irritating type of questions is:**
    a- Open ended question.
    b- Direct question.
    c- Leading question.
    d- Reflective question.
    e- Why question.

58. **Before conducting examination, you should tell the patient all the following <u>except:</u>**
    a- The purpose and the nature of the physical exam.
    b- The need for relative such as husband
    c- When the examination may be uncomfortable.
    d- Contraindication of the Examination .

59. **Investigations should be performed in all the following situations <u>except</u>:**
    a- When the result will assist in diagnosis.
    b- When the result will assist in follow-up
    c- When the result will change in management plan.
    d- When the patient insist for such investigation.

60. **All the following are considered good questions asked during consultation <u>except</u>:**
    a- Do you have any particular concern about your health?
    b- Can you tell me about things at work?
    c- What is your monthly income?
    d- What do you think the reason of your problem?

61. **To establish good rapport, the following techniques are preferred <u>except</u>:**
    a- Shake hands if appropriate.
    b- Focusing firmly on the patient.
    c- Start with closed question.
    d- Greet the patient by his / her preferred name.

62. **Patient doctor relationship is strongly affected by all the following <u>except:</u>**
    a- Interest
    b- Trust
    c- Responsibility
    d- Reassurance

63. **When Ali came with diabetes and Saud came with diabtes also. Ali and Saud were managed differently by their family doctor.This type of care is known as:**
    a- Comprehensive care.
    b- Continuous care.
    c- Personalized care.
    d- Promotive care.

64. **Yasser is 45 years old , came to his family doctor complaining of sore throat . His family doctor manage him for this problem and advised him to practice regular exercise as 30 minutes daily for five days weekly. This later type of health care is known as :**
    a- Coordinative care.
    b- Continuous care.
    c- Promotive care.
    d- Comprehensive care.

65. **Mohammed is 25 years presented to your clinic with backache for the last five days. After full history and relevant physical exam, you asked nurse to measure his blood pressure. His blood pressure was found to be 160/100mmHg .**

This type of detection of diseases before symptomatic stage is known as:
- a- Health promotion.
- b- Screening.
- c- Case finding.
- d- Periodic Health Examination.

66. Functions of family include all the following except:
- a- Socialization.
- b- Providing status.
- c- Providing care.
- d- Production.

67. One of the following is not a component of triangulation:
- a- Doctor.
- b- Patient.
- c- Community .
- d- Family .

68. All the following are classified as major changes that lead to stressful life except:
- a- Death.
- b- Divorce.
- c- Change job.
- d- Separation.

69. Pedigree can give all the following information except:
- a- Date of birth.
- b- Pattern of disease in the family.
- c- Economic status of the family.
- d- Marital status in the family.

70. Healthy (functioning) family is characterized by all the following except:
- a- Richness.
- b- Good communication.
- c- Supportive.
- d- Dealing with stress efficiently.

71. Family conference is useful in all the following situations except:
- a- When a serious disease is diagnosed in one of the family members.
- b- When a chronic disease is diagnosed in one of the family members.
- c- When one of the family member want to travel abroad.
- d- When one of the family members is admitted to the hospital.

72. Boundaries in family system theory means:
- a- The border between each two members of family.
- b- Demarcation between inside and outside the family.
- c- Another term of family circle.
- d- What is considered to be acceptable and unacceptable behavior between family members.

73. Family cohesion describes :
- a- The closeness of two families.
- b- The closeness of two members of family to each other.
- c- The ability of the family to adapt a new member.
- d- The stage of couple before marriage.

74. Important duties of Family physician should include all the following except:
- a- Education of his/her patients.
- b- Introducing the highest of quality of health care to his/her patients.
- c- Education of his /her colleagues .
- d- Participation in social activities with of his/her collages.

75. All the following are good strategies to make communication more effective except:
- a- Use Medical jargon.
- b- Giving clear instruction.
- c- Summarization.
- d- Avoid uncertainty.

76. The most important factor causing complaints against doctors is
- a- Unavailability of drugs.
- b- Malpractice.
- c- Poor communication.
- d- Long waiting list.

77. Evidence Based Medicine (EBM) takes in consideration all the following principles except:
- a- Patient values and norms.
- b- Current valid clinical research..
- c- Opinion of the seniors and consultants in the specialty.
- d- Cost of the intervention.

78. The most common cause of medical errors is:
- a- Lack of experience .
- b- Lack of advanced medical technologies

c- Lack of system.
d- Poor community participation.
e- Lack of clinical guidelines.

79. All the following concerning counseling are true except:
a- It depends on the therapeutic effect of the doctor.
b- General Practitioners are the effective doctors to give counseling.
c- It is doctor – centered process.
d- It is cooperative problem solving process.

80. When the adult patients feel illness, the first action will be:
a- Visiting his/her family doctor.
b- Going to the nearest pharmacist and ask medications.
c- Consulting his/her relatives.
d- Attemping self care .

81. One of the following is not an advantage of continuity of care
a- Improving compliance with drugs.
b- Improving compliance with appointment.
c- Lowering the rate of morbidity.
d- Lowering the cost.

82. About one fourth of patients attending primary health care centers suffering from symptoms related to:
a- Joints.
b- Muscles.
c- Throat.
d- Stomach and colon.

83. The simplest way to detect non-compliance with medications is:
a- Monitoring the clinical response to drugs.
b- Monitoring the patients attendance to clinics.
c- Asking patient about his/her compliance .
d- Measuring the therapeutic level of drug.
e- Counting pills.

84. One of the following statements about screening for diabetes is false:
a- Screening for diabetes for those above 45 years old and body mass index above 25 should be carried out every three years.
b- Should be done for ladies who have been diagnosed with gestational diabetes.
c- Should be done for those discovered to have hypertension.
d- Should be done for those individuals with family history of Type 1 diabetes mellitus.

85. One of the following is not a principles of primary health care :
a- Health education.
b- Community participation.
c- Multi-sectoral coordination.
d- Using appropriate technology.

86. Most of families exhibit:
a- Happy features.
b- Stress features.
c- Unhappy features.
d- Fluctuating mixture of happy and unhappy features.
e- None above.

87. Unique features of family practice include all the following But :
a- Anticipatory care.
b- First contact care.
c- Holistic approach.
d- Sophisticated care
e- Cost-effective care.

88. Family physicians ask for few laboratory tests for their patients because:
a- Most of patients coming to them do not need investigations.
b- Most of family practice settings are lacking of laboratories.
c- Family physicians know their patient well.
d- Most of patients attend family practice have self-limited problems.

89. The rate of referral from primary health care centers to general hospitals in KSA is about:
a- 5%.
b- 10%.
c- 15%.
d- 20%.
e- 1%.

90. **Saad is a 55 years old male admitted to private hospital for inguinal hernia repair , the elements of consent that he should sign must contain all the following components except:**
    - a- Nature of the operation.
    - b- Expected complications of the operation.
    - c- Other differential diagnosis such as femoral hernia. .
    - d- Cost of the operation.

91. **The most common cause of mortality in KSA is:**
    - a- Road traffic accidents.
    - b- Coronary heart diseases.(CHD)
    - c- Malignancy.
    - d- Chronic Obstructive lung diseases.

92. **Which one of the following is not an element of consultation in Stott & Davis Model:**
    - a- Management of the continuing problem.
    - b- Management of presenting problem.
    - c- Establishment of good rapport with the patient.
    - d- Practicing opportunistic health promotion .

93. **Hassan is a 45 years old male presented to your clinic for follow up asthma. Assessment his status revealed that he was well till four days ago, when he developed dry cough and wheeze. Chest examination showed rhonchi . The next step is:**
    - a- To refer him to ER.
    - b- To ask for chest-X rays.
    - c- To prescribe Salbutamol PRN.
    - d- To measure Peak expiratory flow by using peak flow-meter.

94. **Salwa is a 50 years old female attended your clinic complaining of polydypsia for the last four weeks. No other significant complaints . You asked for Fasting plasma glucose. Result was FPG = 153 mg/dl . Your action would be:**
    - a- Asking for GTT to confirm diagnosis .
    - b- Referring the patient to hospital..
    - c- Telling the patient that she is diabetic and educate her about life styles changes.
    - d- Telling her that she is mild diabetes and she needs small dose of Metformin.

95. **The best method to detect poor compliance with drugs among diabetics is:**
    - a- Assessment regular follow up of diabetics.
    - b- Assessment the metabolic control of DM.
    - c- Asking patients to bring their drugs when they come to clinic.
    - d- Ask patient about compliance in non-judgmental way.

96. **It is recommended to screen for all the following tumors except:**
    - a- Colon cancer.
    - b- Breast cancer.
    - c- Cervical cancer.
    - d- Prostate cancer

97. **All the following are elements of PHC but:**
    - a- Health education.
    - b- Childhood care.
    - c- Management common health problems.
    - d- Health team approach.
    - e- Provision essential drugs.

98. **Important tools that are required to implement concepts of PHC include all the following but:**
    - a- Teamwork .
    - b- Action plan.
    - c- Medical records.
    - d- Community survey
    - e- X-rays and Lab. facilities.

99. **All the following is not a characteristic of essential drugs at PHCC:**
    - a- Easy to store and purchase.
    - b- Cheap.
    - c- Broad spectrum of use.
    - d- Safe.

100. **The most effective health education method to change attitude is:**
    - a- Conference.
    - b- Face to face meeting.
    - c- Pamphlets.
    - d- Booklets.
    - e- Lectures.

Answers

1-Answer: C
Arithmetic mean is sum of all the values divided by the total (7x12)=84/12=7 calls.

2-Answer: B.
Central tendency is measured by mean , median and mode. Standard deviation measures the dispersion

3-Answer: C
Normal distribution curve is inverted bell like shape in which the mean, median and mode have the same value , about 68% of data lie within one standard deviation and about 95% of data will be within the second standard deviations while 99.7% of data will be within three standard deviation , this curve is symmetrical around the mean with uni-modal character.

4-Answer: C.
When you compare mean of continuous variables such as cholesterol regarding sex, you should use (student–t-test) in order to find if there is difference between means of cholesterol in female and male .On other hand, you use (Chi-square test- x^2) to find difference between two or more qualitative variable such as type of diabetes and grade of obesity. Analysis of variance(ANOVA) is used instead of t-test when we want to test for differences of means among more than two groups(e.g. means of cholesterol in Arabian,, American and European people).McNamara test is used to find difference for qualitative variable in the some situation (e.g. different in grade of obesity among male and female after intensive diet regimen).

5-Answer: C.
Dispersion could be defined as the degree to which the values are scattered around the mean, it could be measured by range, variance and standard deviation(SD). Large value indicates wide dispersion of values around mean and vise versa. Variance describes the amount of overall variability around the mean in negative and positive directions. Range is the difference between the highest and the lowest value in any set. SEM is the ratio of the of the sample standard deviation to the sample size ($s/\sqrt{n}$) where (n) sample size and (s)=standard deviation.

6-Answer : C
Systematic evaluation of health services in cyclic manner based on standards is known as audit. It aims to identify the defects and design a plan to overcome such defects. It is commonly used as a tools of Total Quality Management(TQM) which deals with all aspects of health services(i.e. structures, process, outcomes and the clients also). Quality assurance and quality control are elements of what is known as TQM.

7-Answer: D
Introducing high quality of health services depends on many factors that interact to give excellent product . these include : clear vision, specific objectives, leadership, teamwork ,and incentive. Authority is essential to run the official daily activities , but not contribute significantly to improve the quality of health services.

8-Answer: D
Medical records have many advantages.;they are considered important tool in improving quality of health services through documentation of what were carried out for clients in the daily practice .They have vital role when medical errors occurred and investigation such errors are requested from the high authority. They have so many data and information which could be very helpful to conduct many studies in medical field.(mortality studies, morbidity studies, practice management research…etc.

9-Answer: D.
Variables could be classified into qualitative and quantitative .Data that could be measured on numeric or quantitative scale are known as quantitative type .They could be divided into two sub-types: discrete integer values such as(number of wounds), and continuous such as age, weight and weight. Qualitative data are those variable that could not be measured on scale but could be categorized such as : sex, marital status, pain severity .Variables could be measured on four main scales: nominal scale such as color(white, red, green, yellow) or ordinal scale such as(good,fair, poor, very poor), interval scale such as: temperature in which the difference between every consecutive two values is identical on the scale. Ratio scale is similar to interval scale except that in ratio scale , the value of(zero) has real meaning (e.g weight is zero) compared to that temperature is zero(this does not mean that there was no temperature).

10-Answer : D.
Medical education is the process of changing the learner knowledge, attitude and skills in his field , while health education is the process of

informing the people about the healthy habits , health promotion is the process through which health care providers enable clients and community to practice healthy habits . Integration of the best research results, experience of clinicians with the patients and community values is what is known as evidence based medicine(EBM).

11-Answer: A.
Even RCT is the best type of studies which could provide us with best clinical evidence, a single RCT is weaker than many RCT published from different places and analyzed critically by independent investigator using statistical methods to combine and summarize the results of many studies and then giving final conclusion(meta-analysis). Prospective (cohort studies) followed these two type of studies and lastly case –control(retrospective studies is considered the least strong type of epidemiological studies mentioned in the question

12-Answer: C.
There are several risk factors for osteoporosis ; sedentary life, thin body build, inadequate calcium and vitamin-D intake, white and Asian race, high alcohol intake, smoking, hyperthyroidism, chronic renal and hepatic diseases, long term use of (steroids, thyroid hormone, heparin and anti-convulsants . Age is considered the strongest risk factor for the condition as age increase the possibility of this problem increase. Protective factors include: obesity, diabetes mellitus, and diuretics .

13-Answer: A.
There are many risk factors for CHD,; these factors could be classified to modifiable such as DM, hypertension, high cholesterol and smoking The non-modifiable risk factors include age, male gender, family history of premature CHD(before 55 years old)

14-Answer: B.
Smoking tobacco is associated with increase in the incidence of several malignant tumors including: Lung, larynx, esophagus, pancreas, oral cavity, bladder and kidney cancer. Smoking was not found to be associated with liver cancer .

15-Answer: B.
The sensitive test is able to detect those individuals with disease while specific test is able to detect those individuals without diseases. Accuracy is general term that affected by sensitivity and specificity of test.

16-Answer: D.
Sampling is the process by which every individual among the total population has the same chance to be chosen. Sampling has many advantages; decrease cost, effort, bias and give almost the same results that could be obtained from total population of the study .

17-Answer: D.
Sensitivity and specificity reflect the accuracy of the test. Positive predictive value is the proportion of those subjects who have the disease and give positive test dividing by the total subjects show positive test. Positive and negative predictive values are affected by the prevalence of the disease among subjects undergone the test, while the sensitivity and specificity of tests are almost always constant.

18-Answer: B
According to Mortality report issued by Saudi MOH ,young people were found to be the most common victims of road traffic accident , those between 25-40 years represented 31% of the total death from RTA . Total victims of RTA annually was found to be about 4000 death. The second common cause is cardiovascular diseases and then malignancies.

19-Answer : C.
According to national epidemiological consecutive studies , it was found that the incidence of DM is increasing from 5% during 1980s to 23.7 % in 2000s .This dramatic increase is most likely due to change of lifestyles such as diet and sedentary life.

20-Answer: B
Although most of ARI cases are caused by viral infection which is known to be self-limited , many but not most of patients received antibiotics "commonly Amoxicillin". This bad prescribing behavior is multi-factorial and reflects knowledge and attitude of a practitioner working in KSA.

21-Answer: D
Life style changes such as in-taking unhealthy die, sedentary life and smoking are responsible for most of the chronic morbidity such as CHD, COPD, and cancer . Life style changes such as regular exercise, in-taking well balanced diet with good fibers contents and avoiding passive and active smoking will minimize occurance of many diseases (DM, obesity, high lipid, many cancers).

22-Answer: A.

There are many risk factors for CHD, including age, smoking, HTN, DM, sedentary life , stress and dyslipidemia. However, the most important contributing factors for death from CHD are smoking, HTN and dyslipidemia.

23-Answer: A.
Smoking related malignancies is numerous. It cause more than one third of cancer death in US. It increases MI by two folds, lung cancer by 20 folds, COPD by about six folds and bladder cancer by 1.4-1.6 folds.

24-Answer: C.
Event though there are several risk factors for developing PVD which include DM, HTN, Dyslipidemia, high lipid . Smoking remains the most important risk factor for this health problem.

25-26 Answers: A & B.
Sensitivity is the proportion of those with positive test and disease (15) to those with the disease(28)=54% while positive predictive value is the proportion of those with positive test and disease (15) to those with positive test (37)=41%.

27-28 Answers: C(27) & A(28).
The relative risk is the incidence rate of chicken pox among those exposed divided by the incidence rate among those not exposed (21/70 divided by 453/1760)=0.3/0.25=1.2. This means that " those who exposed to infectionus agent are 1.2 risky to develop chicken pox compared to those who did not expose. Incidence of Chicken pox= 70/1830=3.8%

29-Answer: D.
Viral hepatitis are caused by seven serotypes(A,B,C,D, E,F,G). The most common types seen in KSA is Hepatitis-B(16.8/ 100.000 of population) , followed by hepatitis-A (12.3/100.000 population) and then hepatitis-C(10/100.000 population) . Hepatitis -A affects children more than adults and Hepatitis-B and C affect adults than children. Hepatitis-B,C, D,and G could be sexually transmitted .

30-Answer : C.
Almost all patients suffering from brucellosis develop fever. Other clinical features include: headache, night sweating, joint pain (60%),fatigue, anorexia, and splenomegaly(20%) .

31-Answer: D.
Prevalence of falls among elderly in the community is about(30%). Balance disorders are the most common underlying cause of falls among elderly (26%) followed by dizziness (25%) and then confusion(10%), postural hypotension(2%) and less than 1% caused by drugs.

32-Answer: C.
At least one third of elderly suffers from constipation. Many causes are responsible for this problem;(decrease physical activity, using many medications, decrease the general health in addition to poor fluid and diet intake) .

33-Answer: C
According to the recent national data, the percentage of elderly(>65 years) constituted (3-5%).Due to the improvement of the health and economic status of the population it is expected that this figure will exceed (10%) during he coming ten years.

34-Answer: E.
There are three levels of prevention: Primary(intervention before development of disease) and include immunization, exercise, intake of well balanced diet , use of seat belt . Secondary prevention : intervention that conducted to detect disease early before symptoms of diseases occur such as screening for HTN, DM, Cancer. The tertiary prevention is referred to the intervention that should be carried out in order to minimize complication of disease after its occurrence(e.g Post Myocardial infarction rehabilitation).

35-Answer: D.
There are many risk factors contribute to atherosclerosis among them : Smoking, Diabetes (DM),High cholesterol, low HDL, High LDL, High Triglyceride, lack of activity(no exercise) , Hypertension(HTN), and hyperhomocysteinaermia). High HDL is a protective against atherosclerosis formation.

36-Answer: E.
Periodic Health Mantaince (PHM) consists of many items obtained by history taking , physical examination , investigations. Data base should be frequently updated and include: family history of premature cardiac death, life styles practice such as smoking and exercise, dietary habit and occupational hazards. Marital conflicts should not be included in PHM.

37-Answer: B.
In this adult , we should update his personal data and assess him for CHD and cancer risk factors (

smoking, occupation, exercise , dietary habit, safe sex, using seat belt during driving, intake of alcohol , last vaccination), we should measure his blood pressure, weight and calculate his BMI. We should ask for fasting plasma glucose and fasting cholesterol, there is no evidence regarding assessing him for anemia unless there is strong justification .

38-Answer: E.
There are many items that should be included in PHM for this lady as mentioned in Question(37and 38),however, there is no need to ask for hepatitis-B serology as it is not recommended by any health organization.

39-Answer: A.
In those individuals above 50 years who had normal results in their PHM, they should come annually to check their blood pressure .

40-41:Answers: E &E
At six month of age the infants who come for well baby care ,he should be assessed for Congenital Dislocation of Hi)CDH), examination of testis, assess hearing and measuring weight, height and head circumference. You should ask parents about any concern . Testing for radio-femoral delay is mandatory to be done at birth and at two months age to rule out coarctation of aorta.

42-Answer: D.
It is recommended that DT should be given at ten years interval after receiving three essential doses in the first year and two booster doses between (18-60 months of age).

43-Answer: E
The minimum age at which the child could be given varicella vaccine is 12 months. The second dose could be given between 4-6 years.

44-Answer: D.
HIV positive subjects could receive most of the recommended vaccines . However, there are few exceptions(oral polio, oral typhoid ,Varicella and smallpox vaccines).

45-Answer: D.
Rotavirus vaccine which is live pentavalent vaccine is administered orally and can be given with other vaccines. First dose should be given between 6-12 weeks, also this vaccine could be given at 2,4,6 month of age with the other childhood vaccines, the three dose should be completed by eight months. This vaccine is highly effective concerning reducing visits to emergency department and hospitalization by about 95% . Intussusceptions which was reported in the previous type of tetravalent rotavirus vaccine. Rare side effects include vomiting, diarrhea, nasopharyngitis,and broncho-spasm. Absolute contraindication for this vaccine are: history of serious allergic reaction to previous dose.

46-Answer: B
There are two types of Influenza vaccine ; trivalent inactivated influenza vaccine(TIV) and live attenuated influenza vaccine(LAIV).The first type could be given at six months while (LAIV)could be started at five years old. Those who are known to be allergic to egg should not receive influenza vaccine as they will develop severe allergic reaction. Other vaccines are safe in individuals who are allergic to egg.

47-Answer: B
The appropriate temperature for vaccines storage should be within 2-8 C, away from light . Vaccines should not be kept in freezer.

48-Answer: D
Hepatitis-A vaccine is now one of the recommended vaccines that should be administered to children starting at 12 months of age. Two doses are administered with six months interval. In adults it is recommended to be given to the following groups: health care workers, IV users, homosexuals, food handlers, patients with chronic liver diseases, sewage workers and travelers to endemic areas of hepatitis-A.Patients on hemodialysis should receive hepatitis-B vaccine

49-Answer: D.
The meningococcal vaccine cover protection against four serotypes(quadrivalant), group –B is not included.

50-Answer: A.
51-Answer: C.
In children present with mild to moderate diseases such as gastroenteritis and upper respiratory tract infections they could be given all types of vaccines .If the child has severe diseases, vaccines should be postponed in order to avoid confusion between the severe side effects that caused by vaccines and the diseases.

52-Answer: D.
There are few contraindications for MMR vaccine (live attenuated vaccine). Those include: Low platelets, allergy to Neomycin, and pregnancy but not allergic to Penicillin or egg. MMR could be give to patients who have AIDS.

53-Answer: E.

The important events that take place in human life cycle are known as vital statistics . They include: death, birth, divorce, marriage . On the other hand, separation, courting are not considered as vital statistics.

54-Answer: D.
Data collection, interpretation and presentation is known as biostatics. Study the distribution and determinants of diseases is the definition of epidemiology. Survey is a method of monitoring a health phenomenon through gathering data from individuals or from records that could be used to know the current situation of the community and to use such data bases for planning . Proposal is a description that will be written by the researcher indicating how his research will be conducted(action plan of research).

55-Answer: C.
Epidemiological triad consists of three elements ; presence of agent that can cause the disease, host which is prone to get the disease and the environment that provide good media to occurrence of disease. Reservoir is the site where the agents multiply and survive .

56-Answer: B.
There are several types of questions that we ask during consultation; open-ended questions such as "tell me about your pain", direct question such as " where is your pain?", closed ended questions like" is the pain severe?", and leading question such as" the pain seems to be severe ;does it?"

57-Answer: E.
The most irritating question asked to the encounters is the question start with "WHY". This type of question makes the patient in defense situation and may lead to breaking of doctor patient relationship. If it is necessary to ask such type of questions you can ask it in different way like : can you give me some reasons for your high blood sugar instead of why your blood sugar is almost always high?

58-Answer: D.
Before conducting any type of examination , as physician you should tell the patient what is the objective of such procedure and its nature, and the need for relative or nurse especially among females. It is not necessary to tell the patient about contraindication of exam because physician should not conduct any procedure that its risk is known to be more than its benefit for patients.

59-Answer: D.
Absolute indications for asking for laboratory test are numerous. However ,the most important indications are to rule in or rule out specific diagnosis, to monitor progress of diseases, or for legal reasons. Patient request should be taken in consideration particularly in those patients who insist for request and difficult patients who may create problems for you and your team.

60-Answer: C.
During consultation , doctor should ask good questions to their patients. The questions should be simple , clear, specific and some time direct or open questions.Doctors should try to avoid using "WHY" or any other private questions such as "what is your income?"

61-Answer: C.
To establish and to keep good rapport with your patient, it is vital to know your patient's names before entrance the consultation room, stand and welcoming him with his preferred name, shaking hand if the same sex. Do not make your self busy and keep eye to eye contact during consultation. It is preferred to start consultation with open-ended question in order to explore the main reason for visit.

62-Answer: D.
There are many factors which strongly affect the relationship between doctors and their patients. The doctors attitude is the most important factor .Attitude is reflected through good care, respect the patient and trust to introduce good health services. Other factors such as clinical competency and confidence are also important but they affect the quality of health care more than the doctor patient relationship.

63-Answer: C.
There are many terms used in family practice. They include comprehensive care which contains curative, preventive and rehabilitative aspect of care for all ages, both sexes and all body systems. Continuous care means introducing all services for individuals through his life cycle while personalized care emphasize that every individuals should be managed in special way considering all circumstances. Promotive care is enabling the individuals to acquire knowledge and skills that help them to practice healthy lifestyles .

64-Answer: C.
During consultation , we should advise our patients to practice healthy habits such as

exercise, stopping smoking, eat low fatty diet and avoid illegal sex . Such process is known as health promotion . Coordinative care is type of health services that introduced to individual through other health care providers (orthopedician)or other agency (social agency).

65-Answer: C.
In family practice there are secondary preventive measures that usually conducted as opportunity to detect asymptomatic individuals who come to family practice for other reasons. Case finding in which the individuals who come for other reasons are assessed for presence of common health problems such as hypertension, diabetes , smoking is one of the most cost-effective methods for detection of heath problems and their risk factors. Periodic Health examination is targeted procedures that include updating demographic data, carrying out specific examination and laboratory investigations at specific age. Screening is the early detection of diseases which carried out for population in the community more than at health care settings.

66-Answer: D.
There are many functions for family; these include: Provision educational and economic status, introducing all types of care , enable members of family to communicate , implantation of social values & norms and reproduction through legal sexual relationship.

67-Answer: C.
Triangulation occurs in relationship when a third person is drawn into a two-person system to diffuse or to displace the anxiety or conflict. Its components usually include doctors, patients, friends or any member of family.

68-Answer: C.
In our lives there are many stressor that could affect our family dynamic . Some of them are major and lead to severe stress such as death of relatives, divorce or separation. Moderate stress could be produced by change job, residency or retirement or debts .

69-Answer: C.
Family tree or pedigree could provide health care providers with important information such as date of birth, sex, marital status, morbidities in family and to some extent the family dynamics such death, divorce, separation and conflicts . However, it does not tell us about the economic status or family income .

70-Answer: A.
Family is any two or more individuals linked legally to each other. Functional or healthy family has many criteria: healthy communication, personal autonomy, flexibility, appreciation of those members achieving objectives in their lives , support network, ability to manage stress efficiently. Good economic status of family is not necessary to make the family more or less happy.

71-Answer: C.
Family conference is a meeting which is conducted in family house or family physician office in presence of the concerned individual and his physician and some members of family , it is conducted for about 30-60 minutes . Reasons for conducting such meeting are many and include: negotiation of action plan for patient problem, to help family to cope with long chronic problem , to discuss therapeutic options for family member, and to understand the bio-psycho-social dimensions of problem.

72-Answer: D.
Boundaries are the rules under which every one of family member operates . Norms and values of community are the cornerstone of boundaries (what is acceptable and unacceptable within a family).

73-Answer: B.
In family medicine ,there are many terms used to describe relationship in family. One of them is family cohesion where two of family members are close together. Ability of family to adapt a new member is an adaptation . Courting is a stage in family cycle that precedes marriage.

74-Answer: D.
Family physicians have many responsibilities to their patients, colleagues, family and community . They include introducing the best quality of health services for their patients and community on the best available evidence based medicine, to educate juniors physicians and the other health care professionals in the health team . Participation in social activities is necessary .However, the other three functions are more important in family physicians daily life.

75-Answer: A.
Communication is the cornerstone of consultation in family physicians daily practice . It is considered the important tool to introduce high quality health services in family practice. Every health professional should acquire the essential skills of communication. There are many strategies that make communication more effective; avoiding use of medical terms, explain

to your patient in very clear concise and simple language, avoid uncertainty , modify your language depending on the individuals background , make summary in the end of communication session.

76-Answer: C
In daily practice many patients may admit complaints against health care providers including physicians . There are many underlying reasons that could relate to patient personality, doctor characteristics, health care system and environment. The poor communication between health care providers and clients is responsible for the majority of complaints against doctors.

77-Answer: D.
EBM is defined as the conscientious integration of the current valid results of clinical research , experience and the patients values in order to introduce safe and high quality preventive and curative health services.

78-Answer:C
There are many causes for medical errors . they could be contribute to health care providers, patients, medical facilities and equipments. It was found that lack or weak system in the health care facility was responsible for 80% of medical errors.

79-Answer: C.
Counseling could be defined as " giving advice" to client. It is patient centered process in which the client has the major role to play in order to solve his/her problem. During counseling the client learns how cope and mange his problem by himself and this needs the patient to be active and cooperative .Counseling is considered an therapeutic option for many problems such as stress,crisis management and many social problems.

80-Answer: D.
Almost all patients who develop minor illnesses depend on themselves to manage their problems. Many options of self care are attempted such as rest, sleep, using over counter medications . The next step is to ask their relatives or family member for help and then going to pharmacists for drugs and lastly they consult their doctors if they did not improve . If the problem is severe such as severe chest pain or abdominal pain they will visit their doctor as they are afraid to have serious underlying causes.

81-Answer: C.
Continuity of care is one principle of family practice. It has so many advantages; maintain good relationship of patients with their physicians, improving patients compliance with medical advices including appointment and drugs and lowering the health services cost . In spite of the importance of continuity of care in providing preventive services ,it has minor role regarding decreasing mortality rate.

82-Answer: C
Many epidemiological studies from Saudi Arabia revealed that at least one out of four patients attending primary health care centers(PHCC) suffer from symptoms related to respiratory symptoms particularly the upper parts(nose, throat and larynx).The second most common morbidity among patients attending PHCC is gut problems and then muscles and joints pain .

83-Answer: C.
Although assessment of compliance among patients is difficult task , there are many methods to measure it in general practice. The most effective and easy way to detect the poor compliance is to ask the patient using "non-judgmental approach" . Monitoring attendance and counting pills are other methods which are difficult , non-practical and lack of reliability .Measuring therapeutic effect could be used in hospitalized patients and for those on antiepileptic drugs.

84-Answer: D
Screening for DM is recommended by many organization for individuals who are at risk . They include adults people with BMI> 25 and additional risk factors(inactivity, first degree relative with type-2 DM, women who delivered baby of 4.5 kg, or had GDM in the previous pregnancy, hypertensive patients, patient with dyslipidemia, and female having polycystic ovarian disease. For those without any factor, they can start screening at 45 years old and if result was normal it could be repeated every three years.

85-Answer: A.
Primary care bases on four principles namely, use appropriate technology, community participation, multisectoral coordination and equity of distribution of health services in the community. Health education is considered an element but not a principle.

86-Answer: D.
Our lives changes dramatically , happy days, unhappy days .Many and different stressors make our lives more fluctuating in its nature.

87-Answer: D
Features of family practice are unique. Its features include:introducing comprehensive, ,curative, preventive ,continous , coordinative ,cost-effective , evidence based care with holistic approach.. Anticipatory care introduced to prevent diseases occurrence. First contact means that family physician and family practice is the gate of entry to health care system ," holistic approach means " taking in consideration the biological, psychological, mental, social, and spiritual dimensions while caring for your patients"

88-Answer: C.
Even most of patients attend family practice either for minor problems or for chronic diseases which need many laboratory investigation , family doctors ask for lab. investigations less than the other specialists because they know their patients since long time (continuity of care) which saves money and time) for patients and health settings.

89-Answer: A.
According to many national reports and studies from Saudi Arabia, the rate of referral from primary health care center ranged between 3-5%.Females during pregnancy constituted the majority of referrals .

90-Answer: C.
Any patient admitted for any type of operation should be provided with written adequate information (informed consent). The consent should contain the nature of the problem, the nature of the operation if any and its expected complications. If the patient admitted to private hospital the patient should be informed about the cost of operation and any other relevant cost . Differential diagnosis is not a part of consent

91-Answer: A.
According to the MOH report issued in 2006, the CHD represented about 21.8% of the total mortality followed by injury and poisoning(18.3%), neoplasm represents about (4.6%) .

92-Answer: C.
Stott and Davis model of consultation has four elements ; managing the presenting problem/s , managing the continuing problem/s, modification of health seeking behaviors and introducing opportunistic health promotion services. Establishment of good rapport with the patient is the first phase of consultation.

93-Answer : D.
Assessment of patients with bronchial asthma aims to know the degree of severity and then to choose the appropriate action. In this patient who is known to be asthmatic, we should start with history which should include: day and night symptoms, visiting ER, using of PRN bronchodilators, use inhaler steroid, next step is conducting physical exam which includes: looking for respiratory distress signs (cyanosis, nasal flaring, use of accessory muscles, counting respiratory rate, examination chest for signs of bronchial asthma). The next step is asking the patient to use peak flow meter to assess the degree of bronchial constriction and then compare it with normal value . Asking for X-rays is not recommended unless considering other pathology or complicated asthma . Referring patient to ER is not necessary as you can mange most of asthmatics in your setting unless the patient has severe attack that does not respond well for initial management such as Beta agonist inhaler or neobilizer.

94-Answer: C.
In patients who present with classical symptoms of diabetes(polyuria, polydypsia, weight loss) and fasting plasma glucose(>=126 mg/dl) are considered to have DM and should be managed . This lady should be informed in nice way that she had diabetes and she should start to change her life styles through regular exercise(30 minutes/ day for five days weekly and to modify her dietary habit through reducing total daily calori (55% carbohydrate, 15% proteins and 30% fat). She should reduce her intake of simple sugars and reduce daily intake of saturated fats. If she is overweight or obese she should start weight loss program .Metformin could be started if life styles modification fail to lower blood sugar within three months of its initiation . .

95-Answer: D.
At least one third of diabetic patients do not adhere to their physician medical advice which lead to poor metabolic control. Assessment of regular follow up is one tool for compliance assessment , counting pills is not practical or reliable methods to assess poor compliance. Measuring metabolic control by using fasting plasma sugar is not reliable as many diabetics could fast for long time(>12 hours) or comply to medical advices for short time before attendance which give false impression in this regard. Asking the patient in non-judgmental way is a good method to assess compliance among diabetics.

96-Answer: D.
There are screening tests for cervical cancer(pap smear), breast cancer(mammography), colonoscopy for colon cancer.There is no

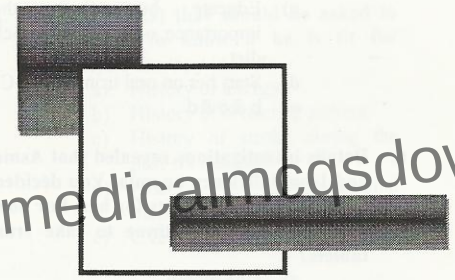
screening test for most of malignancies including leukemia,ovary,bladder, thyroid or lungcancers .

97-Answer : D.
There are eight elements of PHC namely: Maternal and childhood care, environmental health, control of endemic diseases, provision of safe water and food, provision essential drugs, immunization , management of common health problems and injuries and health education .

98-Answer: E.
In order to practice PHC concepts we need all the tools mentioned in the question. However, laboratory and X-rays are supportive services that are not essential to be in every PHCC if we consider the cost-effective and appropriate technology that should be implemented at PHCC.

99-Answer: B.
Essential drugs are those medications that should be available at PHCC,they are compound , safe ,with less side effects, cover broad spectrum of health problems in the community, their cost is acceptable,and could be purchased and stored easily .

100-Answer: B.
There are many methods that are used to conduct health education in the community . All methods can affect the knowledge of people .However, change of attitude needs more than giving information . Face to facemethod is the suitable approach to change not only knowledge but also changing attitudes of clients toward healthy habits.



Chapter Four

Internal Medicine

Asma is 23 years old Saudi female housewife .She attended your clinic yesterday complaining of fatigue for the last four weeks .Detail history revealed that her menstruation is heavy and takes about 7-8 days per month .She mentioned that she did not like to eat meat ,egg and milk . Physical examination revealed the following findings: BP=120/70 mmHg, P=88pbm, eyes and lips were pale , no jaundice , no clubbing or koilonychias, CVS and GIT were normal.

1. **Based on the above mentioned findings, the most likely diagnosis is:**
   a) Sickle cell anemia.
   b) Minor thalasemia .
   c) Folic acid deficiency anemia.
   d) Iron deficiency anemia.
   e) Anemia of chronic diseases.

2. **You asked for CBC which revealed the following::Hb=10g/dl,MCV=69fl, MCH=23pg/dl,Plat=500.000/mm^3 .You wanted to confirm the diagnosis.The most appropriate single test that you should ask for is:**
   a) Total Iron Binding Capacity (TIBC),
   b) Serum Ferritin.
   c) Hemoglobin electrophoresis.
   d) Serum transferrin.
   e) Blood film .

3. **The most likely underlying cause of anemia in this patient is:**
   a) Inadequate iron intake in diet.
   b) Malabsorption.
   c) Menorrhagia .
   d) Hemolysis.
   e) a&c.

4. **The most common chronic diseases causing anemia is:**
   a) Liver Cirrhosis.
   b) Chronic renal failure.
   c) Diabetes
   d) Connective tissue diseases.
   e) Inflammatory bowel diseases.

5. **You decided to do further investigations for Asma , but she told you that she could not do it due to that she has social obligations . The next step would be:**
   a) Refer her for further investigation in spite of the above reason.
   b) Give her appointment within one month.
   c) Educate her about the importance of intake iron rich diet.
   d) Start her on oral iron and vit-C.
   e) b &c &d .

6. **Details investigations revealed that Asma had Iron deficiency anemia. You decided to prescribe Iron tablets for her. For how long she should continue to take Iron tablets?**
   a) One month.
   b) Two months.
   c) Nine months.
   d) eight months.
   e) Six months.

7. **The best parameter to assess her response to Iron therapy is:**
   a) TIBC.
   b) Ferritin.
   c) Reticulocyte count.
   d) MCV.
   e) Hemoglobin.

8. **Jaber is 63 years old Saudi male presented to Emergency Department complaining of recurrent chest pain for the past three weeks. He told you that the pain become more severe today. To distinguish between cardiac and non-cardiac pain ,it is essential to ask him all the following questions but:**
   a) Radiation of the pain.
   b) History of smoking.
   c) History of bronchial asthma.
   d) History of hypertension.
   e) Duration of the past attacks.

9. **After taking history and conducting physical examination ,the next step is to :**
   a) Give sublingulal nitroglycerine.
   b) Ask for chest X-rays.
   c) Refer patient to the cardiologist.
   d) Ask for ECG &cardiac enzyme.
   e) Give Oxygen and IV Morphine.

10. **Results of the investigations reveals the following: Normal chest-X rays, Cardiac enzymes did not appear yet, ECG showed Q-wave and ST segment elevation in V1,V2,V3,V4. The most likely diagnosis is:**
    a) Acute peri-carditis.
    b) Acute antero-lateral MI.
    c) Acute Anterior MI.
    d) Acute inferior MI.
    e) Acute posterior MI.

11. The question(s) that should be asked to this patient to know if he is fit for thrmbolytic therapy include

a) History of allergy .
b) History of bronchial asthma.
c) History of stroke during the past six months.
d) History of Gastrointestinal bleeding .
e) C & D.

12. One week later this patient was discharged, before discharging , cardiologist should do <u>one</u> of the following test/procedures.

a) Echocardiography .
b) Stress test.
c) Angiography.
d) Chest X-rays.
e) Chest CT scan.

13. This patient came to your clinic at family practice center and askd you about resuming sexual activity.Your response wouldl be:

a) When the pain totally disappear.
b) When his wife ask him to practice sex with her.
c) He can resume it after five weeks.
d) When he want to do it unless there is dyspnea on exertion.
e) He should not think about such activity during the coming three months.

14. One month later his wife called you stating that her husband died while he was sleeping , the <u>most</u> likely cause of his death was:

a) Myocardial re-infarction.
b) Cardiac failure.
c) Ventricular fibrillation.
d) Angina.
e) Pulmonary embolism.

Saad is 53 years old Saudi manager presented to your office suffering from recurrent chest pain which radiate to left arm for the last three months .

15. Which one of the following characteristics did not suggest angina pectoris :

a) Pain that is aggravated by stress.
b) Pain that is worsen with effort.
c) Pain that is associated with dysphagia.
d) Pain that lasts less than 30 minutes.
e) Pain that is relived by Nitroglycerin .

16. The <u>first test</u> that you should ask for to distinguish between cardiac and non-cardiac chest pain would be:

a) Echocardiography.
b) Chest X-rays.
c) Stress ECG.
d) Coronary angiography.
e) Endoscopy.

17. <u>One</u> of the following factors is not accounted as risk factor for CHD?

a) Cholesterol.
b) Triglyceride.
c) Smoking Cigarette.
d) Diabetes Mellitus.
e) Premature death of one of parents from CHD.

18. Intesive evaluation of the above mentioned patient revealed that he was suffering from stable angina . Which <u>one</u> of the following medications is not advised to be prescribed for this patient:

a) Aspirin.
b) Captopril.
c) Atenolol.
d) Diltiazem.
e) Clopidogrel.

19. This patient came after one month telling you that he read about Prinzmetal angina and asked you about it. You can tell him the following information about it <u>But:</u>

a) It occurs equally in both sexes.
b) It occurs as a result of coronary artery spasm.
c) Calcium channel blockers are the drug of choice.
d) It could be manifested as ECG changes of ST segment.
e) It could progress to MI.

Tawfeeq is 73 years old Saudi male farmer attended your clinic today with his younger son suffering from progressive shortness of breath (SOB) for the last five weeks . History revealed the following information:smoking 30 cigarettes daily for the last 30 years, hypertension since ten years on Atenolol and ACE inhibitor(capoten). Physical examination was as following: BP=170/100mmHg, pulse 78pbm, RR=22bpm. JVP was normal . Chest exam revealed bilateral creps. Rest of examination was normal.

20. The <u>next step</u> in management Tawfeeq would be:

a) Start him on Diuretics.
b) Ask for Chest X-rays and ECG and act according to the results.
c) Refer him to cardiologist.
d) Ask for cardiac enzyme, CXR, ECG and give appointment within 24 hours.
e) Start him on Nifedipine orally and measure his BP after 30 minutes.

21. You acted accordingly , the results revealed that Tawfeeq has left heart failure .Your action now is:
a) Refer him immediately to hospital.
b) Start him on frusemide and evaluate him after 30 minutes.
c) Start him on diuretics and Digoxin and give him appointment within 48 hours.
d) Start him on diuretic and refer him to hospital for admission.

22. The appropriate action was executed, two days later the patient called you at 4pm telling you that he developed three attacks of dizziness. Your response would be:
a) Ask the patient not to stand up frequently.
b) Ask the patient about his blood pressure reading .
c) Advise him to go to his cardiologist immediately.
d) Ask him to come to your clinic immediately.
e) Ask him to give you more information about the current complaint.

23. Two months later, He came to you with lower limb swelling. Examination of CVS revealed that his JVP was elevated and his limbs were edematous . The most likely diagnosis now is:
a) Left ventricular failure.
b) Pericarditis.
c) Nephrotic syndrome.
d) Right heart failure.
e) Core Pulmonale.

24. The most likely cause of the above diagnosis in question(23) is:
a) Diabetic cardiomyopathy.
b) Hypertensive cardiomyopathy.
c) Ischemic Heart Diseases.
d) Lefte ventricular failure.
e) Core pulmonale.

25. The most common cause of heart failure is:
a) Diabetic cardiomyopathy.
b) Valvular diseases.
c) Hypertension.
d) Hyperlipidemia.
e) Ischemic heart diseases.

26. Which one of the following therapeutic measures is not recommended for patients with acute heart failure?
a) Salt restriction.
b) Bed rest.
c) Home oxygen.
d) Fluid intake restriction.

27. Fares is a 33 years old male came to your clinic and told you that he suffers from recurrent attacks of dyspnea and dizziness for the last three months which become more severe during the last four days. You did physical examination and found systolic murmur in the aortic area that radiating to the neck. The most likely diagnosis is:
a) Mitral incompetence.
b) Aortic stenosis.
c) Mitral prolapse.
d) Aortic regurgitation .
e) Pulmonary valve stenosis.

28. To confirm the diagnosis, you would ask for:
a) ECG.
b) Stress ECG.
c) Echocardiography.
d) Chest X-rays.
e) Upper GI endo-scopy.

29. The most common valvular disorder is:
a) Aortic valve regurgitation
b) Mitral valve prolapse.
c) Aortic valve stenosis.
d) Pulmonary valve stenosis.
e) Mitral valve regurgitation .

30. One of the following drugs causing tachy cardia:
a) Nitrate.
b) Diltiazem.
c) Nifedipine.
d) Verapamil.
e) Aspirin

31. One of the following agent causing constipation
a) Nitrate.
b) Diltiazem.

c) Nifedipine.
d) Verapamil.
e) C& D.

32. Two of the following agents are cardioselective Beta blockers:
a) Atenolol and Salbutamol.
b) Atenolol and Metoprolol.
c) Metoprolol and Propranolol.
d) Salbutamol and Propranolol.

33. Salwa is a 35 years old Saudi Female teacher presented to your clinic complaining of recurrent palpitation for the last three months .Detail history was insignificant. Examination of the heart found midsystolic click murmur and late systolic murmur.The most likely diagnosis is:
a) Aortic valve regurgitation
b) Mitral valve prolapse.
c) Aortic valve stenosis.
d) Pulmonary valve stenosis.
e) Mitral valve regurgitation .

34. The drug of choice to relive palpation in this patient is:
a) Verapamil.
b) Diltiazem.
c) Propranolol.
d) Any one of the above drugs.

35. This patient consulted you regarding using antibiotics before dental extraction , your response would be:
a) Giving Amoxycillin.
b) Giving Cotrimexazole.
c) Giving Erythromycin.
d) Giving Peniciilin-G.
e) No need for giving any antibiotics.

36. Saad is a 43 years old Saudi healthy male presented to your clinic without any complaint. On examination you found the following:BP= 150/100 mmHg , P=83 BPM , Weight = 85Kg, ht=1.6m, Rest of examination was normal. This patient has:
a) Hypertension.
b) Obesity.
c) Overweight.
d) a & b.
e) a & c

37. Your action now regarding this patient would include all the following except:
a) Repeat measuring BP within ten minutes.
b) Ask for FBS and lipid profile.
c) Start Atenolol 50 mg daily.
d) Assess the patient for Coronary heart diseases risk factors.
e) Give the patient an appointment within two weeks.

38. This patient came back to you after six weeks . History and physical exam and investigations revealed the following data: BP=140/80 mmHg, weight=82kg, uric acid =9mgldl,FBS=98mg/dl,TC=180mg/dl, LDL=120mg/dl. Your action would be:
a) Reinforce life styles modification.
b) Start him on Atenolol or diuretic .
c) Reassure the patient and give him an appointment within six weeks.
d) Start him on Allopurinol.
e) a &c.

39. After one year, this patient came back to you in order to do annual check up for him. Which one of the following test is not recommended to be a part of the annual check up?
a) Lipid profile.
b) Fasting plasma glucose.
c) Cardiac Enzymes.
d) ECG.
e) Fundoscopy.

40. Six months later this patient came back to you , checking his BP revealed the following reading for three consecutive days(160/95,160/100,160/100 mmHg).You decide to start him on antihypertensive agent. Which one of the following agents is considered to be the best drug of choice for him?
a) Captopril.
b) Atenolol.
c) Hydrochlorothiazide.
d) Nifedipine.
e) Propranolol.

41. Six months later, this patient came to you as regular appointment.The least important question to ask him would be
a) Compliance to drug.
b) Compliance to exercise.
c) Expectation from this visit.
d) Quality of life.
e) Side effects of drug .

42. The above mentioned patient attended after one year to your clinic for regular follow up. He mentioned that his sexual performance decreased gradually since starting him on anti-hypertensive medication. The most likely drug that causing this problem in this patient is:

a) ACE inhibitors.
b) Angiotensin Receptor Blockers.
c) Beta Blockers(BB).
d) Calcium Channel Blockers (CCB).
e) Diuretics.

43. Hassan is a 51 years old Saudi male manager attended to your clinic suffering from cougir for the last four months. Detail history revealed that he may have Chronic Bronchitis.Which one of the following would not support this diagnosis?
a) Productive cough.
b) Smoking for the last 20 years.
c) Recurrent attacks of productive cough most of days of the last four years.
d) Family history of bronchial asthma.

44. Which <u>one</u> of the following findings is <u>unlikely</u> to be present when evaluating the above mentioned patient?
a) Body Mass Index(BMI) grater than 30kg/m^2
b) Cyanosis.
c) High PCO2.
d) Hyper-infllatted lung.
e) Low FEV1.

45. This patient was managed accordingly ,four weeks later he presented with productive cough and fever for three days. Physical examination found that there was scattered creps, and X-rays of chest showed increase lung markings. The <u>most</u> likely diagnosis is:
a) Influenza.
b) Acute Bronchitis.
c) Bronchial Asthma.
d) Lobar pneumonia.
e) Chronic bronchitis with acute exacerbation.

46. The most common causative agent causing the new event in this patient is:
a) Moraxella catarrhalis.
b) Streptococcal pneumoniae.
c) H. Influenza.
d) Influenza type-A.
e) Staphylococcal aures.

47. Management of the new problem in this patient include all the following remedies <u>except:</u>
a) Amoxycillin.
b) Salbutamol.
c) Oral steroids.
d) Ipratropium.
e) Home Oxygen.

48. While you read the pulmonary function test of the above mentioned patient you expect to find all the following finding in PFT <u>except:</u>
a) Low FEV1.
b) Low FEV1/FVC.
c) Low FEF25-75.
d) Low residual volume.
e) Low diffusion capacity.

49. All the following are considered common cause of chronic cough in adult patients <u>but :</u>
a) Chronic bronchitis.
b) Bronchial asthma.
c) Postnasal drip.
d) GERD.
e) Bronchiectasis.

50. The best diagnostic method to assess the severity of COPD is:
a) Chest X-rays.
b) Arterial blood gas(ABG).
c) Chest MRI.
d) Pulmonary function test using spirometry.
e) Bronchography.

51. Salwa is 23 years old college student attended yesterday to your clinic . She mentioned that she had three attacks of dyspnea,dry cough for the last six months. She mentioned that she developed these symptoms when she exposed to dust or fogs . One of her family has allergic rhinitis and she had eczema during childhood. On examination she looked well, not in respiratory distress . Her chest examination revealed wheezing but no creps or decrease of air entry. Which one of the following information is least important educational concept that should be given to Salwa?
a) Bronchial asthma is reversible inflammatory airway disease.
b) Bronchial asthma is genetic disease.
c) Bronchial asthma could worsen by exposure to dust, smoking and allergens.
d) Control of bronchial asthma could be well achieved by implementing personal active role in its care .
e) She should use salbutamol inhaler when she develop acute

attack and then come to the nearest family practice or hospital for further care.

52. Your management now should include all the following except:

a) Prescribing Salbutamol inhaler PRN.
b) Prescribing Beclomethazone inhaler twice per day.
c) Prescribing Salmeterol inhaler at night.
d) Asking for X-rays.
e) Measuring her air flow by using peak flow-meter.

53. Two weeks later she attended your clinic stating that her symptoms improved but did not disappear specially at night .Physical exam revealed scattred rhonchi in her chest. Peakflow mete reading was 65% of the predicted value . The grade of severity of asthma now is:

a) Mild persistent.
b) Moderate persistent .
c) Severe persistent.
d) Very severe .

54. Your action now concerning this patient should include all the following But:

a) Double the dose of inhaler steroid.
b) Prescribe Salbutamol inhaler PRN.
c) Prescribe Salmetrol at night.
d) Prescribe oral steroid for two weeks.
e) Prescribe Soduim Cromoglycate.

55. After one month, she attended ER complaining of dyspnea, wheezing . On examination she looked in respiratory distress and wheezy chest . Your action now will include all the following <u>except:</u>

a) Giving 5-8 L oxygen.
b) Give Inhaler Salbutamol.
c) Give Neubilizer Salbutamol.
d) Give IV Hydrocortisone.
e) Obtain Blood gases.

56. After one hour you assessed her and found the following: RR=18bpm,p=85bpm,bp125/80mmHg, Po2=95%, Chest exam revealed few rhonchi . FEV1= 75% of predicted value.Your action would be:

a) Admit her for observation.
b) Observe her for one hour and then assess her again and act accordingly.
c) Explain to the patient her situation and the plan for emergency, prescribe bronchodilators inhaler, inhaler steroid and ask her to follow with her family doctor.
d) Ask for X-rays and act according to the results.
e) Refer her now to the Chest Physician for further management.

57. Ali is 35 years old Saudi Male manager present to ER suffering from right chest pain, fever, rigor and productive cough with scanty blood for the last two days. Physical exam revealed the following findings:BP=130/80mmHg,pulse=85bpm, Temp=39C , RR=20bpm , decrease air entry in the upper zone of the right lung with some rale. The most likely diagnosis is:

a) Acute bronchitis.
b) Pulmonary TB.
c) Influenza.
d) Lobar pneumonia.

58. To confirm diagnosis , the appropriate diagnostic test that you would ask for is:

a) Chest CT scan.
b) Chest X-rays.
c) Arterial Blood gas.
d) Sputum culture.
e) Bronchoscopy.

59. The most likely causative agent in this patient is:

a) Influenza type-A.
b) Streptococcal pneumoniae.
c) Mycoplasma pneumoniae.
d) Mycobacterium tuberculosis.
e) Pneumocystic Carini.

60. The drug/s of choice to treat this patient is/are:

a) Rifamicin &/INH&Pyrazinamide.
b) Amantidine.
c) Penicillin-G.
d) Cotrimexazole.
e) None above.

61. Which one of the following features suggest viral pneumonia more than bacterial pneumonia?

a) Productive cough.
b) Predominant cough.

c) Pleuritic chest pain.
d) High grade fever.
e) Sudden onset of cough.

62. Harsh, non-productive cough without chills or high grade fever which affecting healthy young people is usually caused by:
a) Klebsiella pneumoniae.
b) H.Influenzae.
c) Mycoplasma Pneumonia.
d) Influenza type-A.
e) Legionella pneumoniae.

63. The early sensitive sign of pneumonia in children and elderly is:
a) Tachycardia.
b) Tachypnea.
c) Cyanosis.
d) Crepition.
e) Chest in-drawing.

64. Chest X-rays of patient diagnosed as lobar pneumonia is expected to be normal after:
a) Three weeks.
b) Six weeks.
c) Two weeks.
d) Four weeks.
e) Five weeks.

65. Fauzi is 37 years old Saudi businessman presented to your clinic complaining of heartburn for the last five weeks. He is smoker for the last ten years. No other significant history. Physical exam revealed BP=130/75mmHg,Pulse=75bpm.tem=36.5C , BMI=35kg/m^2 .The most likely diagnosis is:
a) Gastric ulcer.
b) Duodenal ulcer.
c) Hiatus Hernia.
d) Gastro esophageal reflux disease.
e) Gastritis.

66. The best appropriate action to be taken now is:
a) Referring the patient to do Endoscopy.
b) Asking for Chest X-ray.
c) Asking for Barium Meal.
d) Advising him to reduce his weight and to stop smoking.
e) Reassuring him that his pain is self-limited and it will resolve with time.

67. Two months later this patient came to your clinic stating that his heartburn did not resolve and he felt that swallowing became difficult since one week. The next appropriate step of action is:
a) Prescribe H2 blockers and give appointment within four weeks.
b) Reassure him , prescribe Anti-acid for him and give appointment within four weeks.
c) Ask for Chest X-rays.
d) Ask for abdomen ultrasound.
e) Ask for Upper Gastro-endoscopy .

68. Ahlam is a 45 years old Saudi Housewife presented to your clinic complaining of recurrent attacks of upper abdominal pain for the past four months. The pain worsen with eating spicy or fatty meals and relieved by taking anti-acid syrup . Examination revealed mild tenderness in the epigastruim region. The differential diagnosis in this patient include all the following except:
a) Hepatitis-C.
b) Gastritis.
c) Gasrtic cancer..
d) Gallstone.
e) Cholycystitis.

69. The most likely diagnosis in this patient is:
a) Gasrtic ulcer.
b) Duodenal ulcer.
c) Cholycystitis.
d) Gastric cancer.
e) Gallstone.

70. To confirm Gasric or duodenal ulcer , which one of the following tests/procedure is suggested?
a) Barium meal study.
b) Endoscopy.
c) Gastric biopsy.
d) Urea breathing test.
e) Abdomen ultrasound.

71. One of the following features sugges gastric ulcer rather than duodenal ulcer :
a) Pain that worsen by eating food.
b) Fast healing rate.
c) Less likely to develop to malignancy.
d) Epigastic abdominal pain.
e) Absence of H. Pylori .

72. **The gold standard test to diagnose H. Pylori is:**
    a) Stool antigen test.
    b) Serology .
    c) Urea breathing test.
    d) Antral biopsy.
    e) Stool culture and sensitivity.

73. **Sultan is 34 years old Saudi nurse presented to your clinic complaining of recurrent abdominal pain for the last nine months. He described the pain as colicky in nature , aggravated with stress and relived by defecation. The pain is associated with diarrhea mixed with mucous but no blood , every attack lasts few hours and then gradually improved . There is no history of fever, weight loss or lack of appetite Physical examination of this patient is most likely to show:**
    a) Localized tenderness in the left hypochondruim region.
    b) Localized tenderness in the right hypochondruim region.
    c) Localized tenderness in periumblical region.
    d) Localized tenderness in the epigastrium region.
    e) None above.

74. **The most likely diagnosis in the above mentioned patient is:**
    a) Ulcerative colitis.
    b) Bacterial Colitis.
    c) Non-specific abdominal pain.
    d) Crohn's Disease.
    e) Irritable bowel syndrome.

75. **Another feature which <u>frequently</u> seen among patients like Sultan is:**
    a) Nausea.
    b) Abdominal distension.
    c) Fatigue.
    d) Vomiting.
    e) Insomnia.

76. **Which one of the following statements about Irritable Bowel Syndrome is <u>false</u>?**
    a) It is more common in females than males.
    b) Rome criteria is used to diagnose IBS.
    c) Psychological factors play important role in its development.
    d) Its prevalence is about 5%.
    e) Life styles modifications play paramount in its management.

77. **All the following medications are used in management IBS <u>except:</u>**
    a) Loperamide.
    b) Hyosine Bromide.
    c) Despiramine.
    d) Diazepam.
    e) Magnesium Hydroxide.

78. **Nada is 39 years old Saudi female teacher presented to your clinic complaining of bloody diarrhea mixed with mucous, abdominal pain ,fever, fatigue ,loss of appetite and decrease weight for the last two weeks .The most likely diagnosis is:**
    a) Celiac sprue.(CS)
    b) Irritable Bowel syndrome.(IBS)
    c) Crohn's disease.(CD)
    d) Ulcerative Colitis.(UC)
    e) Lactase deficiency.(LD)

79. **In order to confirm the diagnosis ,the <u>single best</u> test to ask for is:**
    a) Lactase enzyme level.
    b) Barium meal study.
    c) Upper endoscopy.
    d) Colonoscopy.
    e) Stool analysis.

80. **The <u>most common</u> affected part of Gastrointestinal tract in such patients is:**
    a) Transverse colon.
    b) Ascending colon.
    c) Small intestine.
    d) Rectum and sigmoid colon.
    e) Descending colon.

81. **Complications that may occur for Nada include all the following <u>except:</u>**
    a) Colon Carcinoma.
    b) Colon perforation.
    c) Nephritis
    d) Toxic megacolon.
    e) Colon strictures.

82. **Which <u>one</u> of the following features suggests Crohn disease more than ulcerative colitis ?**
    a) Involvement all layers of colon .
    b) Involvement colon more than rectum .
    c) Association with renal diseases
    d) Bloody diarrhea.
    e) Weight loss.

83. All the following drugs are used in Ulcerative colitis and Crohn disease except:
    a) Azathioprine.
    b) Metronidazole.
    c) Methotrexate .
    d) Sulfasalazine.
    e) Mercaptoprine.

84. Omar is 31 years old Saudi male butcher present to your clinic complaining of fever, right upper quadrant (RUQ)abdominal pain, nausea for the last three days . His two sons had yellowish eyes two weeks ago , no significant past medical or social history. Physical examination revealed: temp=38.3C, BP=130/70mmHg, P=85bpm, Eye looking yellowish, Liver was slightly enlarged and tender, rest of examination was normal. Omar is most likely to have:
    a) Acute pancreatitis.
    b) Acute hepatitis-A.
    c) Acute Cholycystitis.
    d) Acute Hepatitis-C.
    e) Acute cholangitis.

85. The best diagnostic test that you should ask for would be:
    a) Ultrasound of abdomen.
    b) Liver Enzymes.
    c) Hepatitis Serology.
    d) Amylase
    e) liver biopsy.

86. Management of Omar should include all the following except:
    a) Bed rest.
    b) Diet rich in carbohydrates.
    c) Administration of Hepatitis Immunoglobulin.
    d) Low proteins diet.

87. Family contacts of Omar should receive :
    a) Hepatitis-A immunoglobulin.
    b) Hepatitis-A vaccine.
    c) Hepatitis-B immunoglobulin.
    d) Hepatitis-B vaccine.
    e) A &B

88. Omar most likely to :
    a) Recover without any complications.
    b) Develop chronic status and become carrier.
    c) Transmit this diseases to his wife if practice sex during illness.
    d) Develop acute fulminant status of the disease.
    e) None above

89. Hepatitis- A has the following features But:
    a) RNA virus.
    b) Transmitted by oral-fecal route.
    c) Managed consrevetviely .
    d) Common in adults than in young people.

90. The above mentioned patient attended after six years complaining of fatigue and yellowish discoloration of eyes for the last three weeks. Physical Examination showed that Omar was afebrile ,BMI=24kg/m ,liver normal in size and consistency. Investigations were as following: total bilirubin=6 mg/dl, AST=600 IU, Amylase=120IU, ALT=250 IU, Hepatitis-A IgM was normal, HBsAg (+), HBcAb(+), Hepatitis-C serology was unremarkable . The most likely diagnosis is:
    a) Hepatitis-A.
    b) Hepatitis-D.
    c) Alcoholic Hepatitis.
    d) Hepatitis-B.
    e) Hepatitis-C.

91. Depening on the previous data ,you want to ask Omar some questions. The least important question to be asked would be:
    a) Intravenous drug use. .
    b) Practicing illegal sex.
    c) Eating seafood.
    d) Nature of Job.
    e) Family history of Jaundice.

92. Omar present after 20 years to you complaining of anorexia, weight loss, and fatigue for the past six months. Physical examination revealed the following: Pallor, Jaundice, Spider nevi, small liver size and palmar erythema and mild ascites. The most likely diagnosis is:
    a) Chronic Hepatitis-B.
    b) Liver cirrhosis.
    c) Hepatocellular carcinoma.
    d) Chronic Liver failure.
    e) Hepato-renal syndrome.

93. You asked for complete blood count, which of the following results is/are are expected?
    a) Low hemoglobin.
    b) Low MCV.
    c) High MCV.
    d) High platelets.
    e) A &C.

94. Management of Omar should include all the following But:
- a) Starting Spironolactone
- b) Restriction of salt and protein intake .
- c) Infusion of albumin.
- d) Blood transfusion.
- e) Vitamin- B and folic acid supply.

95. Which of the following marker/s indicate/s past infection of hepatitis-B with immunity?
- a) HBsAg.
- b) HBcAg.
- c) HBeAg.
- d) Anti-HBs.
- e) None Above

96. Which one of the following type of hepatitis could not be prevented by active vaccination ?
- a) Hepatitis-C.
- b) Hepatitis-D.
- c) Hepatitis-A.
- d) Hepatitis-B.

97. Which one of the following statements about Hepatitis-C is correct?
- a) Most of patients recover completely .
- b) Most of patient will develop chronic infection.
- c) Most of patients will develop liver cirrhosis.
- d) Most of patients will develop Hepatocellualr carcinoma .
- e) Most of patients need liver transplantation.

98. Which one of the following statements about viral hepatitis is true?
- a) Most of cases caused by hepatitis-E.
- b) Most of cases will progress to chronic status.
- c) Most of cases are treated by Interferon.
- d) Most of cases are transmitted by illegal sex.
- e) Most of cases are caused by RNA viruses.

99. Which type of Viral Hepatitis has the highest mortality in acute infection phase?
- a) Hepatitis-C.
- b) Hepatitis-F.
- c) Hepatitis-A.
- d) Hepatitis-B.
- e) Hepatitis-E.

100. Fluctuating liver enzymes is seen in which of the following types of viral hepatitis
- a) Hepatitis-D.
- b) Hepatitis-A.
- c) Hepatitis-C.
- d) Hepatitis-B.
- e) Hepatitis-E

101. Ali is a 49 years old Saudi Salesman attended to your clinic for annual check up. History taking reveled that Ali is smoker for the last ten years(20 ciggarettes/day) , no other significant medical , social or surgical history. Exam:was as following:BP=130/80mmHg, pulse=75bpm, BMI=31 kg/m^2 . Depending on the previous data, which of the following investigation/s should be asked for Ali?
- a) Fasting plasma glucose.
- b) Fasting Cholesterol.
- c) CBC.
- d) Urine analysis.
- e) a& b.

102. After two weeks he brought the results of investigations with the following data: Hb=15g/dl, FBS=95 mg/dl, Cholesterol= 270mg/dl, urine analysis=normal. Your action would be:
- a) Repeat the investigations to confirm the results.
- b) Ask for LDL, HDL, TG.
- c) Refer the patient to Endocrinologist.
- d) Ask for Glucose Tolerance Test(GTT).
- e) Do abdominal ultrasound to assess the grade of obesity.

103. Ali Had ------ major risk factors for Coronary Heart Diseases(CHD):
- a) Two.
- b) Three.
- c) Four.
- d) One
- e) Five.

104. He insisted for repeating the laboratory investigation , one week later he brought his investigations with the following results: FBS=97 mg/dl, Total cholesterol=265mg/dl, LDL=115mg/dl,TG=250mg/dl,HDL=50mg/dl. Depending on these results , Ali Had:
- a) Borderline high cholesterol.
- b) Normal LDL.
- c) Normal HDL.
- d) High Triglyceride.
- e) b & c & d

105. **Depending on information in question 104,management of Ali should include all the following <u>except:</u>**
   a) Advise him regarding cessation of smoking .
   b) Advise him to reduce his weight .
   c) Start him on 1500 calories per day and then assess him after one month.
   d) Prescribe Simvastatin 40 mg daily.
   e) Advise him to walk 20-30 minutes/day five times weekly.

106. **Step-one diet therapy for patient suffering from dyslipidemia include all the following <u>But:</u>**
   a) Total calories from fat resources should be less than 30%.
   b) Less than 15% of Calories should be from saturated fat.
   c) Total cholesterol daily intake should be less than 300 mg .
   d) Carbohydrate should constitute at least 55% of the total daily calories.

107. **The above mentioned patient came back after three months. His BMI was 30 kg/m ^{2} ,Total Cholesterol =250mg/dl,LDL=155 mg/dl, HDL=40 mg/dl, TG=240 mg/dl. You decide to prescribe lipid lowering agent .Which one of the following agents would you choose to lower his lipid ?**
   a) Simvastatin.
   b) Niacin.
   c) Cholestyramine
   d) Gemfibrozil.

108. **Before prescribing the selected drug for this patient, one of the following tests is mandatory to ensure its normality.**
   a) CPK.
   b) AST and ALT.
   c) CBC.
   d) TSH.
   e) Electrolytes.

109. **Ali Asked you about the benefits of Fish oil regarding his high lipid , you can say the following information for him But:**
   a) Fish and Fish oil containOmega-3 fatty acids.
   b) Fish and fish oil may reduce triglycerides.
   c) Fish and fish oil may reduce HDL .
   d) Fish and fish oil may inhibit platelets aggregation.
   e) Fish and fish oil may reduce blood pressure.

110. **Zaid is a 35 years old Saudi male teacher presented last week to your clinic complaining of excessive urination and thirsty for the last two weeks.He is not smoker, not alcoholic , no previous history of medical or surgical problem. His father and mothers are hypertensive.Physical examination was as following: BP=130/75, pulse=81bpm, BMI=30.5kg/m^2 .To confirm the expected diagnosis , you should ask for:**
   a) Fasting plasma glucose(FPG).
   b) Random plasma glucose(RPG).
   c) HbA1C.
   d) Urine analysis
   e) A or B.

111. **Results of investigations revealed the following: FBS=140 mg/dl, RBS=230 mg/dl, Urine analysis= ++ sugar and no albumin or acetone and HbA1C=6%.The most likely diagnosis is:**
   a) Type one DM.
   b) Type two DM.
   c) Impaired GTT.
   d) Metabolic X-Syndrome.
   e) Could not be decide yet.

112. **Assume that the above patient was confirmed to have DM type 2 with the above mentioned laboratory results in question 111, the first line of therapy will be:**
   a) Rosiglitazone.
   b) Metformin.
   c) Diet & exercise .
   d) Glibenclamide.
   e) All above.

113. **You decided to ask for annual check up for this patient.Which one of the following tests <u>should not</u> be included?**
   a) Urea and creatinine.
   b) Total cholesterol and Triglyceride.
   c) Serum electrolytes.
   d) 24 hours urine for protein.
   e) ECG.

114. **Fifteen years later this patient developed uncontrolled hyperglycemia in spite of full dose of oral hypoglycemic agents. The most likely cause of this condition is:**
   a) Diabetic nephropathy.
   b) Primary failure of oral therapy.

c) Secondary failure of hypoglycemic therapy.
d) Obesity.
e) Poor compliance to drugs .

115. In order to manage the condition in question 114 , you should :
a) Discontinue oral hypoglycemic agents.
b) Start insulin therapy.
c) Insist for drug compliance.
d) Insist for diet compliance.
e) All above.

116. One month later, this patient presented to your clinic complaining of recurrent attacks of sweating, and hunger .The most likely cause is :
a) Insulin overdose.
b) Tight restriction to diet regimen.
c) Poor diet compliance.
d) Diabetic nephropathy.
e) Poor drug compliance.

117. The best option of management this condition is:
a) Adjust oral hypoglycemic agent.
b) Eat regular snacks .
c) Adjust insulin dose.
d) Omit long acting insulin if any.
e) A&C.

118. Three years later ,this patient attended your clinic.He mentioned that since two months he suffered from bilateral feet burning sensations specially at night . To relive this pain , all the following drugs could be prescribed for him except:
a) Gabapentin.
b) Amitriptylin.
c) Carbamazipin.
d) Capsaicin.

119. Which one of the following statements about type 2 DM is not correct?
a) Most of patients are older than 35 years.
b) Most of patients discovered accidentally.
c) Most of patients develop the same complications.
d) Most of patients comply with advices towards life styles modifications.
e) Most of patients have poor/fair metabolic control.

120. Microvascular complications of DM include all the following except:
a) Angina.
b) Retinopathy.
c) Nephropathy.
d) Peripheral neuropathy.

121. All the following tests/procedures should be carried out for every diabetic patients at each visit to health care setting except:
a) Checking urine for albumin.
b) Checking feet.
c) Checking blood pressure.
d) Measuring weight.
e) Checking blood glucose.

122. Hamza is 65 years old retired male attended last week your clinic suffering from backache, fatigue for the last three months, no other significant personal, medical or social history . On Examination , he was pallor, vital signs were normal, CVS, RS, GIT were normal, there was mild to moderate tenderness in the lumbo-sacral region. You asked for basic investigation which revealed the following results ESR=80mm/hr,Hb=9 g/dl, Spine –X-rays showed osteolytic lesions. The most likely diagnosis is:
a) Chronic Lymphocytic Leukemia.
b) Acute lymphoblastic Leukemia.
c) Myelofibrosis.
d) Multiple Meyloma.
e) Brucellosis.

123. Definite diagnosis in this patient could be confirmed by asking for:
a) Serum electrophoresis.
b) Demonstration of Bence Jones protein in urine.
c) Bone marrow biopsy.
d) Brucella serology.
e) a,b and c.

124. In this patient which one of the following electrolytes will not be affected:
a) Calcium.
b) Magnesium.
c) Sodium.
d) Creatinine.
e) Uric acid.

125. Bleeding that could occur for the above mentioned patient is most likely to be caused by:
a) Deficiency of clotting factors.
b) Infiltration of bone marrow.
c) Platelets dysfunction.
d) Thrombocytopenia.

126. One of the following drugs is not used in the initial phase to mange the above mentioned patient:
a) Vinicristine.
b) Melphalan.
c) Prednisolone.
d) Doxorubicin.
e) Bortezomib.

127. Sawsan is a 32 years old Saudi teacher female presented to your clinic complaining of: night sweating, fever, fatigue and decreasing weight for the last six weeks. No other complaints. Past medical, social and family history were normal . Physical examination revealed the following findings:temp:38.4C, BP=130/75 mmHg, pulse=84 bpm. ENT examination revealed three right neck enlarged rubbery lymph nods of 2.1cm by 1.6cm ,rest of examination was normal. Depending on the above data , the most likely diagnosis is:

a) Multiple Meyloma.
b) Chronic Lymphoytic Leukemia.
c) Acute lymphoblastic Leukemia.
d) Brucellosis.
e) Hodgkin lymphoma.

128. To confirm the diagnosis , you should ask for:

a) Fine needle biopsy of lymph nodes.
b) Bone marrow aspiration and biopsy.
c) Brucella serology
d) Serum protein electrophoresis.
e) Excisional biopsy of the lymph nodes.

129. Results of investigations were as following: normal CBC, normal serology, Reed Sternberg cells. The mother of this patient asked you about prognosis , You can say all the following information for her <u>except:</u>

a) No definite diagnosis yet and her daughter needs further investigations.
b) Her daughter has Non-Hodkin lymphoma.
c) Her daughter has probability of 80% to have complete cure .
d) Her symptoms indicate poor prognosis.

130. Her husband came to your clinic and asked you about her therapy and prognosis, you can tell him all the following information <u>except:</u>

a) His wife needs radiotherapy .
b) His wife most likely to cure from this disease.
c) If hisr wife cured from this disease ,it is less likely to re-occur .
d) Treatment may cause premature cardiovascular diseases.
e) His wife could get pregnancy as any other normal female.

131. Nora is a 32 years old Saudi female who had viral upper respiratory tract infection one week ago. Today she presented to your clinic complaining of gum bleeding for twelve hours. Physical exam revealed multiple petechiae on her skin and buccal region. There was no other significant findings. The next important step to manage this patient is:

a) Refer her immediately to Emergency department.
b) Ask for urgent CBC.
c) Ask for urgent coagulation profile(PT, APTT.
d) Ask for blood film.
e) Start her on oral steroid and ask for CBC.

132. Lab.Results were as following:Hb=14 g/dl,Platelets=20.000/mm^3,WBC= 6.000/mm^3, RBS=140mg/dl, PT and APTT were normal): Your action would be:

a) Refer her to hematologist urgently.
b) Start her on oral steroids.
c) Start her on intravenous steroid.
d) Arrange with hematologist for appointment within 24 hours.
e) Start her on IV immunoglobulin.

133. This patient needs frequent and long term follow up because:

a) This problem is chronic in most of adult patients.
b) Most of cases develop leukemia.
c) Most of cases need surgical intervention.
d) Most of cases not respond well to steroids.
e) Most of cases prone to develop viral and bacterial infections.

134. The Consultant of this patient decided to perform surgical splenectomy for her and asked you concerning the recommended vaccine that should be received before operation. You could recommend all the following vaccines <u>except:</u>

a) H. Influenza vaccine.
b) Meningococcal vaccine.
c) Influenza vaccine.
d) Pneumococcal vaccine.

135. Fauzia is a 73 years old Saudi Female attended to your family practice suffering from pain in her hands, hips and knee joints for the last ten months , there was no fever or sweating or rigors or body weight changes , she is known to be hypertensive for the last ten years on Atenolol 50 mg

once daily. Based on these information , the most likely diagnosis is :

a) Rheumatoid arthritis.(RA)
b) Osteoarthritis.(OA)
c) Gouty arthritis.(GA)
d) Ankylosing spondilitis.(AS)
e) Psudogout.(PG)

136. During conducting physical examination you detected the following findings: Nodes on the distal and proximal interphalngeal and limited movement of hands in addition to bony crepitus.Depending on these physical examination , the important single test that you would ask to confirm the diagnosis is:

a) Joints aspiration.
b) ESR.
c) Joints X-rays.
d) Joints ultrasound.
e) Rheumatoid factor(RF).

137. All the following are considered risk factors in patients suffering from condition in question No 135 But:

a) Ageing.
b) Obesity.
c) Trauma.
d) Hypertension.
e) Diabetes Mellitus.

138. The drug of first choice to treat Fauzia is:

a) Aspirin.
b) Pararcetamol.
c) Intraarticular steroid injection.
d) Indomethacin.
e) Capsaicin.

139. One week later,she attended with some investigation that revealed the following results Hb=14 g/dl, ESR=20mm/hr., Uric acid=7 mg/dl, Fasting glucose=95 mg/dl, creat=1 mg/dl , X-rays wait for reporting. Her joints X-rays would show the following changes except:

a) Narrowing the joint spaces.
b) Bony sclerosis.
c) Subchondral cyst.
d) Bony erosions.
e) Osteophyte formation.

140. Sulaiman is 34 years old Saudi nurse presented to your practice complaining of painful right foot for the last 48 hours . There is no history of trauma, fever, no past history of similar attacks , no significant family or social history. Physical examination showed the following findings: BP=120/70mmHg, temp=37.7 C, weight= 90kgs, height= 165cm, BMI= 33.3 kg/m ^{2}, red tender swollen right big toe.Your initial management of this patient would be:

a) Arranging with rheumatologist for urgent appointment within twenty four hours.
b) Arranging for admission for further investigation.
c) Asking for ESR, CBC and serum electrolytes.
d) Asking for urgent foot X-rays.
e) Starting him on Naproxen orally and give appointment within 48 hours.

141. Results of investigations revealed the following findings: WBC= 8000/mm^3, ESR=27mm/hr,Na=140mmol/l,K=4.3mmol/l, Uric acid= 10 mg/dl. You are doubting about gouty arthritis and you want to confirm the diagnosis. You would ask for:

a) Uric acid level.
b) Urine analysis.
c) Synovial fluid microscopic study of the affected joint.
d) Gram stain of the synovial fluid.
e) All above.

142. Lab.Results showed the following:Uric acid=8mg/dl,normal urineanalysis. Synovial fluid=10.000 WBC/mm ^{3} ,Gram stain was normal, positive birefingent rod shaped crystals .Management this patient should include all the following But:

a) Weight reduction.
b) Allopurinol.
c) Rest.
d) Indomethacin.
e) Intra-articular steroid injection.

143. All the following statements are true concerning pseudogout except:

a) Pseudogout affects knee joints more than big toes joints.
b) Pseudogout incidence increases with advanced age.
c) Symptoms of pseudogout usually resolve with using conservative therapy.
d) Calcium oxalate deposits are present in the affected joints in pseudogout.
e) Chondrocalcinosis on X-rays of the affected joints are pathgnomonic for pseudogout.

144. **Suhad is a 32 years old Saudi female college staff present to your clinic complaining of fatigue , poor appetite for the last ten days , she mentioned that her urine became tea like color and her feet start to swell for the last twelve hours. Past history revealed that she had sore throat one month ago which was managed by using antipyretic and antibiotics and improved within four days. Physical examination was done and the following were found: BP=150/100mmHg, pulse=85bpm, temp=37C , lower limbs edema , ENT and CVS, RS, GIT were all normal. The most likely diagnosis now is:**
    a) Nephrotic syndrome.
    b) Peylonephritis.
    c) Acute renal failure.
    d) Post-streptococcal glomerulonephritis.
    e) Hypertensive nephropathy.

145. **One of the following is considered a diagnostic test for the above mentioned diagnosis:**
    a) Microscopic hematuria.
    b) Total 24 hours urinary total protein is more than 2 grams.
    c) Red Blood casts in urine.
    d) Positive sore throat swab for group–ABetahemolytic streptococcal(GABHS).
    e) Ultrasound of kidney.

146. **Management of this patient should include all the following <u>except:</u>**
    a) Salt restriction.
    b) Protein restriction.
    c) Frusmide
    d) Penicillin-V.
    e) Rest.

147. **Her father asked you about the prognosis of his daughter.You could tell him the following information except:**
    a) This disease could not be prevented by early eradication of GABHS pharyngitis.
    b) This disease is one of the most common cause of end stage renal failure.
    c) Most of patients suffering from this disease will develop end stage renal failure(ESRF).
    d) Most of patients suffering from this problem recover completely.
    e) His daughter needs follow up for expected complications such as hypertension and renal failure.

148. **After five years, this patient attended your clinic suffering from fatigue, skin itching, poor appetite and polyuria for the last four weeks. Examination revealed the following findings: patient looks ill,afebrile BP=170/100mmHg,P=90bpm,BMI=23.9kg/m^2 Scratching marks on the skin. Rest of examination was normal. The next step in management this patient is:**
    a) Asking for urea, creatinine , electrolytes , CBC and plasma glucose .
    b) Advise her to follow life styles modifications.
    c) Asking for X-rays for kidney .
    d) Asking for 24 hours urine protein.
    e) Arrange for urgent referral of this patient to nephrologists.

149. **The results of the investigations showed the following data:Hb =12g/dl, Urea= 80mg/dl, creatinine = 3.7mg/dl, Na= 137 mmol/l,K=4 mmol/l, Random plasma glucose=98mg/dl Ca=6 mg/dl , KUB =normal. Your action would be:**
    a) Asking for kidney ultrasound.
    b) Advise patient to restrict fluids, salts and protein.
    c) Start her on Nifedipine 10 mg BID.
    d) Refer her to Nephrologist.
    e) b,c,d.

150. **Hamed is a 40 years old Saudi male technician presented to your clinic complaining of fatigue and poor appetite for the last one month , He also noticed swelling of his feet since last week. No other past medical ,social or family history. Physical exam revealed the following findings: BP=160/105 mmHg, P=87bpm, tem=36.6C, CVS, RS, GIT, CNS all were normal, lower limbs showed moderate edema. You asked for Urine analysis which revealed gross proteinuria . The <u>most</u> likely diagnosis is:**
    a) Peylonephritis.
    b) Acute renal failure.
    c) Hypertensive nephropathy.
    d) Nephrotic syndrome.
    e) Glomerulonephritis.

151. **All the following are important to confirm the expected diagnosis in this patient <u>except:</u>**
    a) Liver function test.
    b) Kidney function test.
    c) Lipid profile.
    d) Kidney ultrasound.
    e) 24 urine collection for albumin.

152. Results of investigations in question 151 revealed the following: Albumin= 1.3g/dl, urea=35 mg/dl,creatinine=1 mg/dl, 24 urinary albumin= 3.7 grams, cholesterol=260 mg/dl, LDL=170 mg/dl, normal ultrasound of the kidney. Management of this patient now should include all the following except:

a) Advise patient to restrict salts and protein intake.
b) Start Captopril.
c) Start Simavstatin.
d) Refer patient to Nephrologist.
e) Start oral steroid.

153. Maha is a 30 years old Saudi female married presented to your clinic complaining of burning micturation , nocturia for the last two days, there was no history of fever or rigor or flank pain . Physical examination was as following: BP=120/70mmHg,pulse=70bpm,temp= 36.8C, rest of examination was normal. The most likely diagnosis is:

a) Vagnitis.
b) Urethritis.
c) Urinary tract infection(UTI).
d) Cervicitis.
e) Salpingitis.

154. The most likely causative agent is:

a) Chlamydia.
b) E.coli.
c) Proteus .
d) Pseudomonas.
e) Staphylococcal aures.

155. The appropriate action to be done for Maha is:

a) Send urine for culture and sensitivity(C/S), start antibiotics and give appointment after 48 hours.
b) Start a course of antibiotics for three days.
c) Start a course of antibiotics for one week.
d) Ask for kidney and bladder ultrasound.
e) Ask for urine analysis and start antibiotics course for ten days.

156. Urine culture and sensitivity are indicated for the following patients except:

a) A 30 years old male present with dysuria and increasing urinary frequency for the last five days.
b) A 30 years old female with third attacks of dysuria.
c) A 65 years old male present with dysuria and dribbling.
d) A 32 years old female who has symptomless bacturia.
e) A 34 years old female who presented with dysuria that did not respond to three days course of antibiotics.

157. All the following individuals are at high risk of developing asymptomatic bacturia except:

a) 5o years old female in post-menopause period.
b) 34 years old pregnant lady.
c) 30 years old sexually active female.
d) 23 years old female using Diaphragm contraceptive.
e) 28 years old female using IUCD.

158. Aisha is a 39 years old Saudi teacher attended to your clinic with palpitation, weight loss, sweating and hot intolerance for the last two months which become more severe for the last two weeks. Physical exam revealed the following findings: BP=130/90mmHg, P=105 bpm, temp=37C,hand tremor, diffuse thyroid enlargement, lid lag and proptosis of both eyes. The most likely diagnosis is:

a) Hashimoto thyroditis.
b) Grave's disease.
c) Toxic nodular goiter.
d) Phemochromocytoma.
e) Secondary hyperthyroidism.

159. To confirm the diagnosis,you should ask for:

a) T3 &T4.
b) Venylmandalic acid(VMA).
c) TSH.
d) Thyroid ultrasound.
e) Thyroid antibodies.

160. Management of Aisha include all the following except:

a) Propylthiouracil.
b) Methimazole.
c) Radioiodine therapy.
d) Propranolol.
e) Oral steroid.

161. Ten years later, Aisha came back to you complaining of fatigue, constipation ,weight gain for the last four months. Physical exam revealed dry skin, pale conjunctivae, lower limbs edema, lateral eyebrow hair loss , BP=130/70mmHg, pulse=60bpm, ,

rest of examination was normal. The most likely diagnosis is:

a) Depression.
b) Anemia.
c) Chronic fatigue syndrome.
d) Hypothyrodism.
e) Nephrotic syndrome.

162. To confirm diagnosis in Question No 161 , you should ask for:

a) CBC.
b) Urea and electrolytes.
c) TSH.
d) Thyroid ultrasound.
e) Liver function test.

163. The most likely underlying cause of Aisha's problem in Question 161 is:

a) Autoimmune diseases.
b) Psychogenic disease.
c) Multi-factorial .
d) Genetic .
e) Drug side effects.

164. Results of investigations of Aisha showed the following : high TSH , Low T3, CBC= normal,KFT=normal,LFT=normal, Thyroid ultrasound was normal. Your action now would be:

a) Repeat thyroid function test to confirm diagnosis.
b) Start oral steroid.
c) Start thyroxine (levothyroxine).
d) Refer Aisha to endocrinologist.
e) None above.

165. Two months later she attended your clinic for regular check up , you want to ensure her response for medication, you ask for:

a) Thyriod ultrasound.
b) TSH
c) T3,T4.
d) Anti-thyroid antibodies.

166. Five years later, Aisha presented to your clinic complaining from neck swelling, cough and voice changes. Physical exam revealed solid nodule attached to the thyroid , no other significant signs. The best option/s for diagnosis this nodule is/are:

a) Thyroid scan.
b) TSH, T3,T4.
c) Fine needle aspiration.
d) Excesional biopsy.
e) Thyroid ultrasound.

167. Hassan is a 35 years old Saudi male presented to your clinic suffering from headache, fatigue, gaining weight, and visual disturbance for the last three months which become severe since one week. No other complaints. Physical exam revealed the following clinical findings: BMI=34kg/m^2 , BP=150/100mmHg, P=85 bpm, skin shows moderate sweating ,tongue and jaws looking larger than normal, feet and hand looks bigger than normal , eyes examination showed bilateral visual field defects, rest of examination was normal. The most likely diagnosis is:

a) Grave's disease.
b) Acromegaly.
c) Hyperthyrodism .
d) Cushing syndrome.
e) Pheochromocytoma.

168. To confirm the diagnosis , you should ask for:

a) TSH level.
b) Growth hormone level.
c) Pituitary X-rays
d) VineyMandalic Acid(VMA).
e) ACTH level.

169. The treatment option for Hassan include all the following except:

a) Transsphenoidal surgery.
b) Pituitary radiation.
c) Chemotherapy.
d) Bromocriptine.

170. Fadi is a 32 years old Saudi male teacher presented to your clinic complaining of weight loss, fatigue and dizziness for the last three months . He did not have any other complaint, there was no significant family ,social or past medical history Physical examination showed different sites of skin hyperpigmen-tation , BP = 95 / 70 mmHg, weight = 55 kg, Ht = 170 cm, BMI =19 kg/m^2 , P = 90 bpm . The rest of examination was normal. Based on these findings, the most likely diagnosis is:

a) Cushing syndrome.
b) Hyperthyrodism
c) Diabetes insipidus.
d) Addison disease .
e) Diabetes Mellitus.

171. Which of the following metabolic parameters are expected to be found in Fadi condition?

a) Low Na, High K, High Ca.
b) High Na, low K, Normal Ca.
c) High Ca, High K, High Na.
d) High Glucose,High K,High Na.
e) Normal K, Normal Na, Normal glucose.

172. **The most likely cause of Fadi's problem is:**
   a) Pituitary adenoma.
   b) Pancreas tumor.
   c) Adrenal gland autoimmune disease.
   d) Adrenal gland tuberculosis.
   e) Adrenal gland bleeding.

173. **Long term management of Fadi should include:**
   a) Hydrocortisone.
   b) Dexamethasone.
   c) Fluorocortisol.
   d) Growth hormone.
   e) Both a & c.

174. **Salma is a 37 years old Saudi female housewife presented two weeks ago to your practice complaining of general fatigue, polyuria and poludypsia , no other significant medical, social or family history.Physical examination was as following: She looked ill, BP=130/70 , Temp=36.6C, P=80bpm, BMI=25 kg/m^2 .Based on these information differential diagnosis include all the following except:**
   a) Diabetes mellitus.
   b) Diabetes insipidus.
   c) Hypercalcemia.
   d) Hypokalemia.
   e) Hypocalcemia.

175. **You asked for some investigation which showed the following results: K=2.5mmol/l, Na=155mmol/l, Fasting plasma glucose=95 mg/dl, Ca=6 mg/dl.The most likely diagnosis is:**
   a) Adrenal gland hyperplasia.
   b) Adrenal gland adenoma.
   c) Adrenal gland tumor.
   d) Adrenal gland Tuberculosis.
   e) Parathyroid gland adenoma.

176. **The treatment of choice for Salma is:**
   a) Radiotherapy of the affected gland.
   b) Chemotherapy.
   c) Surgical removal of the affected gland.
   d) Anti-Tuberculosis drugs.
   e) None above.

177. **Ameera is a 45 years old Saudi female housewife presented to your clinic complaining of recurrent loin and epigastric pain , constipation and polyuria for the last three months. Detail history did not revealed any significant past medical, social or family int information. Physical examination revealed: BP=160/90mmHg, P=60bpm,BMI=24kg/m^2 , general appearance looks depressed.,rest of examination was normal. You ask for some investigations which revealed the following results: CBC=normal, Ca=12 mg/dl, KUB= Multiple renal stones, Urine analysis= Oxalate crystals, FBS= 98 mg/dl. The most likely diagnosis is:**
   a) Diabetes Mellitus.
   b) Hyperthyrodism.
   c) Cushing syndrome.
   d) Renal stones.
   e) Hyperparathyrodism.

178. **The most likely underlying cause of Ameera's problem is:**
   a) Parathyroid gland hyperplasia.
   b) Parathyroid gland adenoma.
   c) Parathyroid gland tumor.
   d) Multiple meyloma.
   e) Secondary tumor.

179. **The treatment of choice for Ameera' condition is:**
   a) Radiotherapy.
   b) Chemotherapy.
   c) Surgery.
   d) Steroids.
   e) None above.

180. **Fatma is a 35 years old Saudi female housewife presented to her physician with paraesthesia, and weakness in both lower limbs , decrease of vision for the last four weeks, past history revealed that she had two similar attacks six months and ten months ago which took several days and recovered spontaneously after treated by traditional healer. No other relevant complaints. Physical examination revealed the following findings: decrease sensation in both legs, weakness thigh muscles, swelling of the optic disc. The most likely diagnosis is:**
   a) Vitamin-B-6 deficiency .
   b) SLE.
   c) Spinal cord tumor.
   d) Poliomyelitis.
   e) Multiple sclerosis.(MS)

181. **To confirm diagnosis , her physician should ask for :**
   a) Brain and spine CT scan.
   b) Brain and Spine MRI.
   c) Vitamin-B-6 serum level.
   d) CSF examination.
   e) Antinuclear Antibody.

182. **Risk factors of the above mentioned health problem include all the following <u>except:</u>**
   a) White race.
   b) Abnormal sexual behaviors.
   c) Female gender.
   d) High socio-demographic status.
   e) Northern altitude.

183. **Management of Fatma should include all the following <u>But:</u>**
   a) Regular exercise.
   b) Family support.
   c) Interferon.
   d) Radiotherapy.
   e) Steroids.

184. **Course of the above mentioned disease could be described as:**
   a) Progressive in nature in most of cases .
   b) Progressive course after six years from its onset.
   c) Benign course in most of cases.
   d) Remission and relapse course in most of cases.
   e) Could not be expected .

185. **Shareef is a 71 years old Saudi farmer brought to you by his son who told you that his father's movement become slow for the last four months. No other relevant complaints or significant past medical history. Physical exam revealed that Shareef looked depressed, with tremor at rest, his gait was slow and shuffling. BP= 130/90mmHg , P=90bpm, muscles of his upper limbs showed moderate rigidity.Based on these information, Shareef is most likely to have:**
   a) Major depression.
   b) Multiple sclerosis.
   c) Hypothyrodism.
   d) Parkinsonism.
   e) Cerebral infarctions.

186. **The underlying pathogenesis of this condition is:**
   a) Cerebral ischemia.
   b) Pituitary adenoma.
   c) Degeneration of substantia nigra.
   d) Deficiency of serotonin.
   e) None above.

187. **Drug of choice to treat Shareef is:**
   a) Amytriptiline.
   b) Levodopa.
   c) Aspirin.
   d) Thyroxine.
   e) Selegiline.

188. **<u>One</u> of the following statements about essential tremor is false:**
   a) It is familial phenomenon.
   b) It is exaggerated by activity .
   c) It is associated with moderate muscular rigidity.
   d) It could be relived by using beta blockers.

189. **Hadi is 33 years old Saudi male from Tehama presented to your clinic complaining of fever ,sweating and backache for the last four weeks. These symptoms occurred most of the weeks and almost every day. On examination he looks ill, febrile(38.5 C), mild enlargement of spleen . The <u>least</u> important question to be asked to Hadi would be :**
   a) Eating raw meat or raw milk.
   b) Family history of the same problem.
   c) Past history of similar attacks.
   d) Traveling abroad.
   e) Using traditional medicine during the last four weeks

190. **The <u>first</u> investigations that you should ask for to get the definite diagnosis would be:**
   a) HIV serology, Blood film for Malaria and blood culture.
   b) Typhoid serology, Bone marrow aspiration, blood culture.
   c) Leshmania serology, blood film for Malaria and blood culture.
   d) Brucella serology, blood culture, blood film for Malaria.

191. **The most common compliant in patient suffer from Brucellosis is:**
   a) Fatigue.
   b) Poor appetite.
   c) Fever.
   d) Backache.
   e) Night sweating.

192. **Drug/s of choice for Brucellosis include :**
   a) Streptomycin and Rifampicin.
   b) Doxycyclin and Streptomycin.
   c) Tetracyclin and Cotrimexzole.
   d) Doxycyclin and Rifampicin.
   e) Any of the above combinations.

193. **Nora is a 54 years old Saudi female present with cough ,night sweating and fever for the last four months , rest of history was insignificant. Physical examination revealed bronchial sound in the right upper zone of the lung with some creps. Your diagnosis now is <u>most likely</u> to be:**

a) Brucellosis.
b) Pneumonia.
c) Pulmonary Tuberculosis.
d) Bronchogenic carcinoma.
e) Chronic bronchitis.

194. In order to confirm diagnosis, which two of the following investigations would be the appropriate studies to ask for:
a) Chest X-rays and Tubeculin test.
b) Tuberculin test and sputum for Acid Fast Bacilli(AFB).
c) Sputum for AFB and Chest X-rays.
d) Tuberculin test and sputum for culture and sensitivity.

195. By asking for the appropriate studies, it was confirmed that Nora had lung T.B. Which one of the following tests is not essential to be asked for before initiation Anti-TB drugs?
a) Uric acid.
b) Creatinine.
c) Bilirubin , AST and ALT.
d) CBC.
e) Fundoscopy.

196. Which one of the following Anti-TB drugs can cause optic neuritis?
a) INH.
b) Rifampicin.(R)
c) Pyrazinamide.(P)
d) Ethambutol.(E)
e) Stryptomycin.(S)

197. During the first two month of Anti-TB therapy Nora should be treated by :
a) Two Ant-TB drugs.
b) Three Anti-TB drugs.
c) Four Anti-TB drugs.
d) Five anti-TB drugs.

198. Nora is most likely to have negative sputum after:
a) Two weeks.
b) Three weeks.
c) Six weeks.
d) Eight weeks.

199. Nora came back after twelve weeks complaining of skin itching and yellowish eyes,no other complaint.The most likely cause of this new event is
a) INH.
b) Rifamicin.
c) Ethambutol.
d) Streptomycin.
e) None above.

200. Results of investigation done for Nora were as following: CBC=normal, Bilirubin=3 mg/dl,AST=250IU,ALT=270IU, Ultrasound was normal.The next step that should be taken is to:
a) Discontinue all Anti-TB drugs.
b) Ask for hepatitis-serology.
c) Discontinue INH only.
d) Discontinue INH & Rifampicin.
e) b &c.

Answers

Q1(D),Q2(B),Q3(E) Q4(B), Q5(E), Q6 (E), Q7(B)

Although many patients presented with sickle cell anemia or minor thalasemia in the adulthood , Iron deficiency anemia still considered the most common type of anemia. In this patient , the most likely underling causes are heavy menstruation and poor dietary intake of iron rich food such as meat , vegetables and eggs.

The non- invasive gold standard of diagnosing iron deficiency anemia is serum ferritin . The other investigations could help in diagnosis but they are not specific or sensitive for diagnosis this disease. In this lady, the most likely underlying cause is obvious, starting her on diet rich in iron and prescribing iron and Vit-C tablets would be acceptable solution now and then giving her an appointment after one month . Within one month of giving theses interventions she almost responds if she has iron deficiency anemia .Iron supplement should be continued for 3-6 months in order to replenish the iron store. Anemia will respond to iron therapy within two weeks and and will be corrected within three months .It is expected that within 2-3 week the hemoglobin will increased by 1g/dl .The best parameter to assess the response for iron therapy and adequate iron store is ferritin level .

Answer and comments on Q(8-14)

8(C), 9(D),10(C),11(E), 12(A), 13(C), 14(A).

Asking about history of asthma is the least important question in this patient .Almost all patients with asthma present with dyspnea,cough and wheezing but no pain unless the case is complicated by pneumothorax. Other questions such as duration of attacks and radiation of pain will help to distinguish cardiac pain from non-cardiac pain while asking about history of smoking and hypertension are essential as many of cardiac patients have these risk factors and sometime help in narrowing differential diagnosis of acute chest pain.

After taking history and carrying out physical examination ,you should ask for ECG and cardiac enzymes as those two investigations will help to distinguish cardiac from non-cardiac pathology. Asking for Chest X-rays and referring patient to cardiologist are needed but they will not be good options particularly if the chest pain is not typical for cardiac problem ,X-rays will help to narrow differential diagnosis particularly if you suspect aortic aneurysm or lung pathology .Giving Oxygen and sublingual NGT is recommended in management of acute attacks of MI ,it is not necessary to be given unless there is high suspicion of Acute MI.

Before administration of thrmbolytic agent to any patient with Acute MI , you should know if the patient is fit for this therapy or not. Taking comprehensive history is important to identify the absolute and relative contraindications. Absolute contraindication of thrombolytic agents include: any active internal bleeding, any intracranial tumor, any intracranial surgery during the last 6 months, any stroke during the past year, any head trauma associated with loss of consciousness during the past 6 months.Relative contraindications include: GIT or UG bleeding during the past 6 months, any previous stroke, any TIA during the past 6 months, uncontrolled BP>180/110 mmHg, pregnancy, peptic ulcer disease.

Before discharging any cardiac patient we should assess him for CHD risk factors such as DM, HTN, Hyperlipidemia, smoking, lifestyles in addition to recognizing the heart function by doing Echo .Chest-X-rays will be done on admission to rule out complications of CHD or risk factors such as cardiomegally in patients suffering from Chronic HTN ,stress test is usually used to help in diagnosis of angina and evaluation of arrhythmia and post cardiac CABG. Chest CT scan is not to be requisted for post MI patient unless there is another indication, angiography is not routinely asked for unless the patient is candidate for cardiac surgery .

Patient whowas discharged from hospitals after MI should be advised about many activities including sex practice s. This patient can resume sex after five weeks and can come back to his work within two months and he should start normal exercise within one month. Driving car is preferred to be postponed till at least ten weeks. Appearing cardiac enzymes needs at least 30-60 minutes. However, ECG appears immediately , normal ECG will not rule out acute MI. Q-wave and ST elevation in leads V1-V4 indicate that there is anterior wall MI due to occlusion of left anterior descending artery. Anterio-lateral leads represented by V4-V6,I and aVL while inferior wall infarction seen in II,III, and aVF , posterior wall infarction will be seen in lead V6 . Pericarditis will be manifested as ST elevation (concave upward) in all leads without Q-waves..

Patients with Acute MI who die during the first 72 hours of admission die as a result of

arrhythmia while those die later on are usually due to re-infarction.

Comments and answers questions (15-19)

15(C), 16(C), 17(B), 18(B), 19(A)

Angina is a chest-pain that occurs due to cardiac ischemia . Any factor that increases heart demand for oxygen may aggravate angina (stress, effort) , stable angina occurs with effort while unstable angina may occur at rest .Anginal pain is not associated with dysphagia, however esophageal spasm is similar to anginal pain. Nitroglycerin relives anginal pain . Anginal pain is less likely to take more than 30 mites. If so you should consider MI.

Even most of physicians ask for many investigations to distinguish between angina and the other causes of chest pain, good history remains the most important tool to distinguish different diseases manifested by chest pain. When the working diagnosis is angina pectoris the preferred test is stress ECG. If the result of stress ECG is negative you may ask for other tests accordingly.

There are many risk factors for developing CHD, those factors including age and sex, smoking, DM, hypertension, high cholesterol and family history of premature heart death of parents before the age of 55 for fathers and 65 years for mothers. Triglyceride is unknown yet to be a risk factor for CHD while high HDL is considered a protective factor for CHD.

After confirmation of diagnosis of angina all the medications could be used and could help the patient . ACE inhibitors is not advised to be given unless there is co morbidity such as Diabetic nephropathy or heart failure .

Prinzmetal is a type of angina which occurs due to spasm of coronary artery .It affects females more than males , the drugs of first choice is calcium channel blockers , it could be manifested by ST segment elevation more than ST segment depression on ECG.

Answers & Comments on Question(20-26)

20(B),21(D),22(E), 23(D),24(D),25(E),26(C).

Tawafeeq is most likely to have cardiac failure as he had HTN, smoker for long time . Before initiation treatment we should exclude other causes of dyspnea such as COPD and other respiratory diseases so we should ask for chest – X-rays. Next , we should start this patient on intra-venouse diuretics(frusamide) and then refer him to hospital for further management . Any patient known to have CHF and developed attacks of dizziness we should exclude hypotension that could be caused by drugs and arrhythmia which could be associated with CHF. The main features of right heart failure are: raised JVP, congested enlarged liver, and pitting edema over the ankles and sacrum. Pleural effusion and ascites could occur but less common than the previous features. The most common cause of right heart failure is the left heart failure and the most common causes of heart failure are ischemic heart diseases ,hypertension , cardio-myo-pathy and valvular disease . About 40-6% of heart failure is isolated diastolic heat failure in which the ejection fraction is greater than 45%.Heart failure increased in prevalence with age as it is estimated that 10% of those above 65 years have heart failure. Management of acute heart failure should include : admission to hospital , close monitoring, prescribing (oxygen, Morphine, Nitrate, ACE inhibitors, salt restriction, bed rest, control the underlying causes and eliminate the risk factors).

Answer: Q 27(B) Q28 (C)

This patient with this typical manifestations (dyspnea, and dizziness with systolic murmur that radiate to the neck) is the most likely to have aortic stenosis. Other features include: anigal attacks, strong apical impulse, narrowing pulse pressure, and late manifestations may include: signs of left heart failure. To confirm valvualr pathology , Doppler Echocardiography is used , however cardiac catheterization is the gold standard for confirming the diagnosis and estimatin the degree of severity of valvular lesions.

29-Answer: B.

Mitral valve prolapse affect about 4% of the normal population. It affects females more than females and in most of times it is asymptomatic .On the other hand, aortic stenosis is found in 1-2% of people .

30-Answer: B.

There are many causes for tachycardia. They include: exercise, anxiety, fever , hypotension, anemia,hyperthyroidism, heart failure,and drugs.Many drugs could cause tachy cardia such as beta agonist, Nitrates,Nifedipine, and atropine .Diltiazem and beta blockers could cause bradycardia

31-Answer: E.

Verapamil is considered the most common calcium channel blockers causing constipation , however, nifedipine can cause constipation also.

32-Answer: B

Atenolol, Metoprolol, Propranolol are beta blockers which are used in management of hypertension, heart failure , ischemic heart diseases and arrhythmia.Salbutamol is beta2 agonist and used in management bronchial asthma & COPD .Cardioselective beta blockers include:Atenolol,betaxolol,bisoprolol,metoprolol, and nebivolol.

33-Answer: B.
Young female patient who presents with palpitation, sometimes chest pain and found to be thin and has mid-to late click heart murmur is most likely to have mitral valve prolapse .

34-Answer: C.
The drug of choice to manage tachy cardia in this patient would be Propranolol.

35-Answer: E
Even the bacterial endocarditis is three-eight times in those patients compared to general population. This patient should be given antibiotics before dental extraction if she has evidence of mitral regurgitation by auscultation (pan-systolic murmur) or found by echocardiogram.

36-Answer: D
According to JNC VII, Saad had high blood pressure as his blood pressure was above 140/90mmHg. His body mass index(33.2 kg/m^2 which indicate mild obesity(30-34.9 kg/m^2

37-Answer: A.
Those patients whose blood pressure found to be high(>140/90mmHg) should have repeated reading in the same day. It is preferred to repeat blood pressure reading with the same person after ten minutes of the first reading. Assessment this patient for other risk factors and morbidity of coronary heart diseases such as smoking, diabetes , high cholesterol is recommended for those individuals above 40 years particularly in our community where the prevalence of these risk factors are high. Starting of anti-hypertensive in this situation is not recommended as this patient had this reading for the first time , this grade of hypertension could be managed firstly by using non-pharmacological therapies .This patient needs follow up at least within one month in order to establish diagnosis and to discuss practical action planwith him.

38-Answer: E.
This patient is most likely to get benefit from counseling during previous visits to his doctor. His blood pressure , weight decreased as compared with the first visit. His blood sugar and LDL were within normal limit but his uric acid was high . Now, he should be advised to minimize intake of red meats, beans in order to reduce his uric acid level, to practice exercise regularly and to reduce his weight . He should be reinforced and encouraged by his doctor regarding healthy life styles practice. As his blood pressure now is 140/80 mmHg , he needs non-pharmacological therapy mentioned in the previous paragraph. Even his uric acid is high but no symptoms or clinical manifestations of gout, so there is no need to prescribe Allopurinol for this patient.

39-Answer: C.
Those patient suffering from chronic hypertension should undergone annual check up which include: lipid profile, fasting plasma glucose, urea, creatinine, uric acids, electrolytes, ECG, and fundoscopy. Cardiac enzymes, liver enzymes , CBC, and ESR are not recommended to be included in annual check up

40-Answer: B.
As this patient had high blood pressure that was not controlled by lifestyle modification after about six months of initial diagnosis, he should be started on any anti-hypertensive agent taking in consideration his age and co-morbidities. The best drug for young patient like our patient is beta-blockers and the best choice for him is Atenolol as it could be taken as one dose which will help regarding good compliance , it has less side effect compared to Propranolol, it cost is acceptable. Diuretics even effective, it is not the drug of choice in this patient whose uric acid is high, Captopril could be used in this patients, but it has cough as a common side effect in addition to its multiple doses and higher cost , Nifedipne could be used as drug of choice .However, in this patient Atenolol remains the drug of choice for the reasons mentioned before.

41-Answer: C
For any hypertensive patient attended for follow up, doctor should ask him/her many question which can give idea about his compliance to drug, life styles , side effects of drugs or any new complaints related to the complications of hypertension. Some chronic patients including hypertensive patient attend with some expectations and ideas that should be explored adequately ; they include afraid of side effects, need referral, asking for sick leave or report , or other hidden agenda such as sexually dysfunction. As this visit is scheduled , it is more likely to be for follow up , however as physicians we should give attention for the real and the hidden reasons for patients visits.

42-Answer: C.
Most of anti-hypertensive drugs are associated with symptoms such as cough in patients using ACE inhibitors(5-20% of user), tachy cardia and constipation among patients using CCB. Sexual dysfunction(impotance is reported among patients use beta blockers and to lesser extent patients use diuretics.

43-Answer: D.
Chronic bronchitis is defined as chronic productive cough for three months over two consecutive years .In most of case sit is caused by long term smoking , family history of bronchial asthma in non-smoker patient present with chronic cough support bronchial asthma more than chronic bronchitis , asthma is reversible air ways obstruction while bronchitis have irreversible airways obstruction. Dyspnea,wheezing and chest discomfort could associate both conditions.

44-Answer: D
Chronic obstructive pulmonary disease(COPD) could be classified as two categories; Chronic bronchitis (Blue Bloater)and emphysema(Pink Puffers) . However, most of patients with COPD have mixed of both conditions. In patients with chronic bronchitis, they are usually obese ,have productive cough, reduced PO2 and high P CO2 , increase residual volume, decrease FEV1, decrease FEV1/FVC . Patients with Pink Puffers type (emphysema) : are thin , dyspnea, , hyperinflatted lung on X-rays,have mild decrease in PO2 and PCO2.

45- Answer: E.
This patient most likely to have acute exacerbation of chronic bronchitis which is manifested with dyspnea, wheezing and more productive cough. Pneumonia should be ruled out by requesting chest X-rays and monitoring body temperature .Influenza is common to affect those individuals, however its manifestation include generalized body ache, fever, running nose ,muscular pain and headache which least likely to be the diagnosis in this case .This patient is not known to have bronchial asthma , so this diagnosis could be eliminated .

46- Answer: C
The most common organisms associated with acute exacerbation of chronic bronchitis are H. Infleunzae , Streptococcal pneumoniae and Moraxella catarrhalis .

47-Answer: E
Management of exacerbation of chronic bronchitis should include bronchodilators, steroids either inhaler or oral or intravenous . Antibiotics such as amoxicillin, cotri-mexazole, doxycyclin , cefaclor or macrolides . Home Oxygen therapy is not recommended unless the patient had Pa O2< 55 mmHg .

48-Answer: D
In patient with COPD (bronchitis type) FEV1 , FVC, FEF 25-75 and diffusion capacity will decrease while residual volume will increase .

49-Answer: E
There are many causes for chronic cough(cough for more than eight weeks) .They include: Bronchial Asthma(BA), COPD, Bronchiectasis, Congestive heart failure, Postnasal drip (PND), Drugs such as ACE inhibitors and TB. The most common causes are postnasal drip, bronchial asthma , COPD and Gastro-esophageal reflux . Bronchiectasis & cystic fibrosis are rare in our community.

50-Answer: D.
Severity of COPD is classified into four stages; stage:0 = symptoms but normal spirometry, stage I mild (FEV/FVC <70% and FEV1 >=80%) ; stage II moderate (FEV1/FVC <70% and FEV1=50-80%),stageIII severe(FEV1/FVC<70% and FEV1=(30-50%) ; stage IV very severe (FEV1/FVC <70% and FEV 1 < 30% of predicted value.

51-Answer: B.
Bronchia asthma is chronic inflammatory condition of the airways. It has three components; air flow limitation, airways hyper-responsiveness to different stimuli and bronchi inflammation. Air ways obstruction is often reversible .Bronchia asthma could have genetic component specially in people with atopy. Asthmatic patients have major role in self care particularly avoidance of trigger factors and managing the acute attacks of asthma by using beta2 agonist and then going to the nearest health care setting.

52-Answer: C
For asthmatic patient who attended to health care setting, he should be evaluated by taking history, carrying out physical examination , measuring air flow by using peak-flow meter and introducing inhaler beta agonist or neobilizer . Asking for chest X-rays is essential if the diagnosis of bronchial asthma is not clear or if you suspect other diagnosis or to rule out complications of bronchial asthma. Long term management differs according to the severity of asthma which

depends on many subjective and objective parameters. However, most of patients need to be given salbutamol as PRN dose and steroid inhaler. As this patient had less frequent attacks, Salmeterol is unlikely to be prescribed for him .(This patient had mild intermittent asthma).

53-Answer: B
Classification of bronchial asthma could divided into four categories depending on three parameters; frequency of symptoms, night symptoms and the reading of air flow using peak flow meter. In this patient where there were symptoms at night and peak flow meter reading (FEV1= 65%) indicate moderate persistent asthma .

54-Answer: E.
Management the asthmatic adults with moderate persistent grade should include: low to moderate dose of inhaler steroids, long acting beta agonist inhaler. Oral steroids could be prescribed for two weeks and PRN inhaler Salbutamol should be continued . There is minor or no role for using Sodium Cromoglycate in adults generally and in this patient with moderate persistent grade particularly.

55-Answer: B
In patient with acute attack of bronchial asthma such as this case , immediate management include Oxygen, salbutamol nebulizer , and intravenous hydrocortisone . Acute management includes asking for chest X-rays to rule out complicated asthma and arterial blood gas to assess the severity of respiratory distress .As this patient in acute distress , neublizer is preferred than inhaler beta agonist .

56-Answer: C.
This patient showed clinical improvement after one hour of proper management. In this situation we should educate her about self-care, acute attacks care, prescribe short acting beta agonist inhaler, inhaler steroid , advise her to visit her family doctor for follow up .

57-Answer: D
Scenario of this case presented the typical features of lobar pneumonia which started with cough, chest pain, shortness of breath , fast respiratory rate, decrease air entry and rale that heard above the affected lung zone..

58-Answer: B.
For any patient presented with cough , fever and chest pain . The first diagnostic procedure is asking for chest X- rays. This test will help the clinician to localize the affected part of lung, to find out other complications such as effusion, and pneumothorax .

59-Answer: B.
As mentioned in the case, this typical features of streptococcal pneumoniae infection . This organism is responsible for 50% of pneumonia in all age groups followed by Mycoplasma pneumoniae(6%),H.Influnzae(5%)&Chlamydia pneumoniae(5%).

60-Answer: E
Managing patient with pneumonia depends on many factors including: age, expected organism, outpatient management versus inpatient , presence of co morbidities and drug resistance in te community. In this patient of young age with high grade fever, tachpnea and typical features of community acquired pneumonia, he should be admitted to hospital and started on third generation cephalosporin and macrolide.

61-Answer: B.
Typical manifestations of bacterial pneumonia include: fever, productive cough, rigor and chest pain while viral pneumonia is usually manifested with dry cough, malaise, low grade fever, headache and minimal chest findings on clinical examination,Chest X-rays does not proportionate to clinical findings.

62-Answer: C.
Mycoplasma pneumoniae is the second common cause of pneumonia affecting adults. Generalized fatigue and headache may precedes the chest manifestations by (2-5 days). This type of pneumonia characterized dry harsh cough, low grade fever and malaise. H.Influnzae pneumonia usually affects patient with COPD while Legionella is characterized by prodromal viral like illness, dry cough and or loose motion.

63-Answer: B.
Even though ,there is no very specific or sensitive sign that could help in diagnosis of chest infection , counting the respiratory rate remain the most sensitive early sign that could help health care providers to diagnose pneumonia in children particularly less than two years and elderly. This sign should be looked for when evaluating these two groups of patients. The other signs are late manifestations of pneumonia .

64-Answer: B.
Inflammatory process could take at least six weeks till the lung normal picture return back . As a result, X-rays is expected to be normal after six weeks of the onset of the diseases in the case of no complications occurred afterwards.

65-Answer: D.

This smoker and obese patient who presented to your clinic is most likely to have(GERD), gastric cancer in this age is low, ulcers manifested with epigastric pain and affected by meals .Gastritis is pathological diagnosis more than clinical one. GERD occur as a result of relaxation of the lower esophageal sphincter.

66- Answer: D.
The first step in managing patients with GERD is to modify the life styles such as reducing weight in obese patient ,and cessation of smoking in smoker.

67-Answer: E.
Patient with GERD may develop esophagitis, esophageal stricture or adeno-carcinoma. In order to rule in and rule out of these conditions endoscopy is the appropriate interventional procedure. Other answers are inappropriate in presence of the new complaint(dysphagia), however if heart burning did not improve with life style changes you could prescribe Anti-acid, H2 blockers or proton pump inhibitors(PPI). Asking for Chest X-ray or abdominal ultrasound will not add new information and reassurance this patient (with this new compliant) may cause late diagnosis of serious pathology such as esophageal carcinoma.

68-Answer: A
In this patient you should consider all the diagnosises, however hepatitis-C which has chronic nature and does not give the picture described .Other diagnoses could be manifested with abdominal pain,nausea, vomiting, dyspepsia and heartburn.

69-Answer: A.
Although all the mentioned diagnoses could be similar in many of their clinical features, the gastric ulcer is the most likely of them as the pain is in the epigastruic region and worsen by in taking spicy foods. As there was no weight loss ,*dysphagia or vomiting of blood the possibility* of gastric cancer is low .

70-Answer: B.
Direct visualization of stomach and duodenum using endoscopy is the gold standard procedure of diagnosing peptic ulcer. Biopsy will help to differentiate ulcer with or without malignancy while urea breathing test is helpful in diagnosis H. Pylori. Barium meal study could help in diagnosing ulcer but it could miss some small ulcers. Abdominal ultrasound helps to make diagnosis of dyspepsia specially if caused by gall bladder or pancreatic disorders but has no important value in ruling in or ruling out peptic ulcer diseases.

71-Answer: A
Both ulcers have similar clinical features: epigastric pain that relived by anti-acid . However, duodenal ulcer pain could be relived by food while gastric ulcer is aggravated by food . Peptic ulcer is unlikely to develop malignancy , both types are associated with H. Pylori infection in more than 80% while duodenal ulcer heals faster than gastric ulcer does.

72- Answer: D
Visualization of H. Pylori under microscope after taking antral biopsy is the gold standard for diagnosing H.Pylori infection.However,itis rarely used as it is invasive and there are other high sensitive and specific tests of less invasiveness such as urea breath test(UBT)(sen=90-100%), serology(sen = 67-90% ,Sp=75-91%)and stool test.(sen=91%& sp =94 %).There is no role for stool culture and sensitivity in diagnosis H.pylori

73-74: Answer :(E & E)
This patient of middle age who presented with recurrent abdominal pain without any other serious manifestation of inflammatory bowel diseases, malignancy or infections is most likely to have IBS. In patients with IBS, they have recurrent abdominal pain that is associated with alternative bowel habits and relived by defecation.Clinical examination is almost normal between attacks while during attacks there is generalized abdominal tenderness rather than localized. If there is rectal bleeding, fever, weight loss you should consider the other serious pathologies(colon cancer or inflammatory bowel diseases).

75-Answer: C
In patients suffering from IBS. There are other features such as low mood, , and generalized weakness(fatigue). If there are vomiting, nausea *and insomnia consider other diagnosis.*

76-Answer: D.
IBS affects 10-15% of the adult population . It is diagnosed by exclusion the other similar diseases such as inflammatory bowel diseases, Celiac diseases, infections.We depend on Rome II Criteria for diagnosis IBS(at least three month of continuous or recurrent abdominal pain within a 12 months period) the pain is relived by defecation, or associated with changes in stool consistency or change of stool frequency . There is no definite underlying pathology, some factors that aggravate development of IBS: abnormal gut motility, increase visceral

sensitivity, and stress. Life styles modifications such as lowering intake of caffeine, smoking, and taking fiber rich diet , relaxation technique will help in reliving IBS symptoms. There is no curative treatment for this disease.

77-Answer: D.
Management of IBS includes: ruling out the similar organic causes through asking for relevant investigations such as CBC, serum electrolytes, stool analysis for occult blood and ova , plain abdominal X-rays and doing and endoscopy if indicated. Non-pharmacological management include: reassurance ,stress reduction ,diet therapy such as fibers supplement , psychotherapy may have a role in treatment IBS. Using medication should be directed to the main symptoms (Loperamide for diarrhea), antispasmodic for abdominal pain, laxative and fibers for constipation .Tricyclic antidepressants and serotonin reuptake inhibitors could be used also .Anxyolitics such as Diazepam should be avoided as they cause addiction and dependency .

78-Answer: D.
If patient presents with abdominal pain and bloody diarrhea , he/she is unlikely to have IBS, Lactase deficiency or Celiac diseases . The possible diagnosis include inflammatory bowel diseases(UC &CD).The possibility of colon cancer is low as this patient is young , presented with fever but the possibility still there as she had abdominal pain, loss of weight and bloody diarrhea. The possibility of UC is high as this patient presented with its typical features.

79-Answer: D.
In order to confirm the diagnosis in our patient , the single most sensitive and specific procedure is colonoscopy . It will help to localize the lesion and to show the extent of pathology .Other investigations are not needed as the scenario goes with inflammatory bowel diseases more the other listed problems.

80-Answer: D.
Although UC could affect the parts of colon , the most affected areas are rectum and then sigmoid .

81-Answer: C
Colon cancer is 3-10 folds higher than general population. Colon perforation could occur , toxic mega-colon , colon stricture , anemia, osteoporosis . Renal diseases could complicate crohn's disease but not ulcerative colitis.

82-Answer: C
Many features are shared by patients suffering from UC and CD . However, bloody diarrhea is often associated with UC more than CD. CD could affect any part of GIT and manifested with systemic features such as fever , weight loss, joint pain .UC affects colon and involves mucosa and sub-mucosa. Renal diseases occur with Crohn's disease more than UC.

83-Answer: C
Many drugs are used for UC and CD. Steroids, sulfasalazine,mercaptoprine,metronidazole, azathioprine,ciprofloxacin.However, Methotrexate is used in the cases of Crohn's disease .

84-Answer: B
This patient is most likely to have hepatitis-A as he developed his mild symptoms in short period in addition to that his son had yellowish eyes two weeks ago which support that he got infections from him.Acute cholangitis is rare in absence of history of gallstones and high grade fever. Acute pancreatitis is associated with severe epigastric pain and vomiting .Acute cholycystitis is associated with RUQ pain but less likely to have fever or jaundice In Hepatitis-C , most of patients detected accidentally with high liver enzymes even some cases could be presented as mentioned in the scenario..

85-Answer: C.
In highly suspected cases of hepatitis .Hepatitis serology will be requisted in order to confirm diagnosis . Liver enzymes is routinely requested in such condition and it most likely to be high. Ultrasound will not change you diagnosis of hepatitis, but could be requested if you consider another pathology or association with liver cirrhosis . Liver biopsy is the gold standard test for diagnosing hepatitis but it is not usually asked for in acute status as management in acute status of hepatitis is conservative and supportive.

86-Answer: C
Management of patients suffering from acute hepatitis includes: bed rest, rich carbohydrate diet such as honey and date, low protein diet .There is no role for immunoglobulin and antiviral agents in management. As low percentage of patient with acute hepatitis-A may develop fulminant hepatitis we should observe for such complication.

87-Answer: E.
For close contacts of patients suffering from hepatitis-A , they should receive hepatitis-A vaccine and immunoglobulin at the same time at different body sites .Also contacts should receive booster dose after 6-12 months .

88-Answer: A.

Almost all patients suffer from Hepatitis-A will recover without complications. Less than 0.2% will have fulminant hepatitis. There is no chronic or carrier status for hepatitis-A.

89-Answer: D.
Hepatitis-A is RNA virus that transmited through oral-fecal route , it selflimited disease that could be managed conservatively .It is common in young than adults.

90-Answer: D.
With these viral markers this patient has hepatitis-B.

91-Answer: C.
Factors that may be associated with hepatitis-B are several, they include: IV drug abusers, homosexuality, family history of hepatitis-B, some job such as nurses, doctors and lab. Technicians . Eating seafood could cause hepatitis-A but not the other types of hepatitis.

92-Answer: D.
After twenty years many patients will suffer from chronic hepatitis will develop liver cirrhosis which is characterized by fatigue, anorexia ,weight loss and high liver enzymes . Complications of liver cirrhosis include portal hypertension, hepatocellular carcinoma ascites , hepatorenal syndrome and encephalopathy. What mentioned in the question are signs of chronic liver failure while cirrhosis is histological diagnosis more than clinical diagnosis. Hepato-renal syndrome is one complication of liver cirrhosis and manifested as acute renal failure. Chronic hepatitis-B is diagnosed depending on viral markers (HBsAg and HBeAg) and liver histo-pathological changes. Rapid development of weight loss, anorexia, fever , ascites and abdominal pain in patients with liver cirrhosis suggest hepatoma . Hepatoma could be detected by USS which will show focal liver lesions while alpha fetoprotein will be high in such patients.

93-Answer: E.
In patients suffer from chronic liver disease, they may develop anemia with high MCV and low platelets .

94-Answer: D.
Management of patients with chronic liver failure include elimination of fluid accumulation by using **Spironolactone** , and restriction salt and high fluid intake. Reducing the risk of encephalopathy by reducing intake of protein and giving albumin to treat hypoalbuminemia , prescribing multi-vitamines is recommended as most of those patients suffer from various nutritional disorders including vitamins deficiency . Blood transufusion is not recommended unless the patient has low hemoglobin level (< 7 g) or there is active bleeding.Patients with chronic liver diseases should receive pneumococcal vaccines to prevent bacterial peritonitis .

95-Answer: D.
Most of patients who develop acute hepatitis-B infection(95%) will recover completely while minority will develop chronic status .The serum of these recovered completely will show (anti-HBs) and will have immunity against hepatitis-B .Those who will be carriers show postive HBsAg .Active chronic infection is indicated by HBsAg and HBeAg in addition to increase hepatitis-B viral replication.

96-Answer: C.
Although, there is no vaccine for hepatitis-D it could be prevented if we prevent hepatitis-B as it will not occur in absence of this infection . There is active vaccine for hepatitis-A and B which could be given in the first year of life or for those at high risk including health care providers. For the time being there is no vaccine for hepatitis-C

97-Answer: B.
Hepatitis –C is the most common cause of chronic hepatitis. It affects about 2% of the total population. It is RNA virus of six genotypes. Most cases are asymptomatic and will go to chronic status(80%) without clinical apparent manifestations on patients. It is usually discovered accidentally during blood check up for blood donation or during admission for surgical operation .Liver enzymes are usually elevated (2-8 times the normal) and fluctuating from time to time. Liver cirrhosis will develop in 20-25 % of patients .Hepatoma will develop in about 5% of patients with chronic hepatitis-C .

98-Answer: E.
Most of hepatitis viruses are RNA except hepatitis-B. The most common type of hepatitis over world is hepatitis-A . Almost all acute hepatitis will recover except hepatitis-C . Most of hepatitis cases need supportive management except chronic hepatitis-B and C which may need antiviral agents if they develop to chronic status. Most of cases are transmitted through oro-fecal route .(hepatitis-A and E)

99-Answer: E.
Hepatitis-E has the highest mortality rate in the acute infection phase(1-2%) which could be as

high as 20% if it occurs during pregnancy ,The mortality rate for the other types ranges between (0.5 -1%).

100-Answer: C
Hepatitis A and E are acute in nature and resolve without development to chronic status . Most of hepatitis-B case will cure without any complications. Most of patients with hepatitis-C will develop to chronic asymptomatic status with fluctuating in the level of liver enzymes mainly ALT & AST.

101-Answer: E.
Ali is smoker and has obesity which are considered risk factors for coronary heart diseases and DM respectively. It is recommended for those with such risk factors to ask for fasting blood sugar and cholesterol in addition to ask about life styles such as practicing exercise, drinking alcohol and dietary intake. CBC and urine analysis are not recommended to be included in annual check up or periodic health maintenance unless there is strong indications or justification.

102-Answer: B.
Results of this patient showed high cholesterol, normal FBS and Hb. We should ask for lipid profile in order to guide our management .No need to ask for GTT as FBS was normal. It is not recommended to do ultrasound to classify the grade of obesity as calculating BMI is sufficient to make such grading .In good laboratory , it is not necessary to repeat investigation particularly if the results are normal. Family physicians and primary care physician can manage such problems(obesity and high lipid) initially without need to refer them to endocrinologist.

103-Answer: C
This patient is 49 years old, obese ,smoker and has high cholesterol level which made him to have at least four risk factors for CHD .Other risk factors responsible for CHD include: family history of CHD, hypertension , high alcohol intake, lack of exercise, diabetes mellitus , post-menopausal , and high homocystine

104-Answer: E.
The results of investigations showed high cholesterol(>200mg/dl), high TG(>150 mg/dl), normal HDL(>40 mg/dl), and near normal LDL(100-129 mg/dl), normal FBS(<100mg/dl)

105-Answer: D.
Initial management of patients with obesity and high lipid include life styles modification such as cessation of smoking, weight reduction and reducing total daily calories intake and performing daily regular exercise . Prescribing lipid lowering agents should be prescribed if the life styles modification interventions donot achieve the targets after 3-6 months.

106-Answer: B
Step-1 diet therapy include : total daily intake of cholesterol should not exceed 300mg, total calories from fat should not be more than 30% and total calories from saturated fat should be less than 10% and carbohydrate constituted 55%.In step-2 diet; cholesterol(<200mg/day), and total calories from saturated fat should be less than 7%

107-Answer: A.
HMG-CoA reductase inhibitors such as simvastatin are the drug of choice in management of patient suffering from dyslipidemia if diet therapy fail to achieve the target lipid levels. Statin can reduce LDL by 18-55% , increase HDL by 5-15%, and reduce TG by 7-30% . Statins have primary and secondary preventive roles in CHD.

108-Answer: B.
Before prescribing statin, we should ask for liver function test (AST &ALT) as LFT will increase among 2-3% of patients started on statins. Statin could cause increase in the level of liver enzymes greater than the three times of the upper limit in the first three months of use . It is rarely cause severe liver damage and is reversible with discontinuation of use .LFT should be monitored at an interval of 6-12 weeks in the beginning and then every six months . Although using statin could cause myopathies and increasing in CPK level , it is not recommended to ask for it either in the beginning of therapy or periodically.

109-Answer: C.
It is advised to intake at least two meals containing fish weekly. Fish and fish oil contain omega-3 fatty acids which found to have protective effects concerning cardiac events such as sudden death and non-fatal heart attacks . Fish and fish oil reduce such events through reducing CHD risk factors by inhibiting platelets aggregation, lowering blood pressure, TG ,and increasing HDL level .

110-Answer: E.
Zaid presented with typical symptoms of diabetes mellitus(DM) .If this patient came in the morning as fasting, we can ask for FPG , if he attende after takimg his breakfast we can ask for RPG .Both are reliable to diagnose DM. Urine analysis are not specific or sensitive for diagnosing DM

and only done to assess for diabetic nephropathy or for ketone if we think about diabetes keto-acidosis. HbA1C is requested in order to monitor metabolic control in patient known to have DM but not used for diagnosis DM.

111-Answer: B.
Although differentiating between type 1 and type 2 DM is difficult specially in those patients between 20-30 years old. This patient is confirmed to have Type-2 DM. He has obesity, and FPG &RPG were above normal levels . Metabolic syndrome is characterized by mixture of metabolic abnormalities including high blood sugar, hypertension, dyslipidemia, insulin resistant and obesity.

112-Answer: C.
The first therapeutic option in patient with DM and obesity or overweight is prescribing diet for the first three months. If diet and exercise therapy did not make good control metformin could be added as 500 mg BID . Other medications could be started if life styles modification fail and there is contraindications for Metformin .

113-Answer: C.
Diabetic patient should do annual check up which consists of many items including eye examination, cardiovascular and peripheral nerves examination, foot examination, urea and creatinine, lipid profile , ECG and urine analysis for albumin. CBC, electrolytes and Chest x-rays are not recommended to be included in annual check up for diabetics.

114-Answer: C.
There are many causes of poor control among diabetes. The most common causes are poor compliance to life styles changing such as exercise, diet therapy and weight reduction. Poor compliance to drug could cause poor control. In this patient who had good control for many years and showed poor control now is most likely to be due to secondary therapeutic failure which could be described as the target organs fail to respond to therapeutic effect of drugs after years of continuous use . In primary failure, the target organs did not respond from the beginning to oral hypoglycemic agents(OHA).

115-Answer: E
In the case of secondary failure, we should insist for diet and drug compliance in addition to discontinuation of Oral hypoglycemic agents(OHA). Initiation of insulin is recommended in such situation .

116-Answer: A.
In diabetic patients who start insulin, we should educate them regarding symptoms and signs of hypoglycemia . The most common cause of hypoglycemia in those patients is insulin overdose. Poor diet and drug compliance causing hyperglycemia rather than hypoglycemia . Diabetic nephropathy can cause hypoglycemia and those patients need more close monitoring to avoid hypoglycemic attacks .

117-Answer: E.
In those patient develop hypoglycemia , we should educate them regarding the following: symptoms & signs of hypoglycemia, taking regular meals and regular snacks, avoiding strenuous exercise, to have ready made sugar (dates ,Juices,biscuits),doing self-glucose monitoring using glucometer and adjusting insulin doses accordingly.

118-Answer: D.
In order to delay the diabetic neuropathy it is essential to keep blood sugar as near normal as possible. When patients develop peripheral neuropathy as in this patient it is necessary to educate him about the role of good diabetic control and feet care. Reliving painful diabetic neuropathy could be achieved by using Gabapentin, Amitriptylin or Carbamazipin. Choosing of any one of these drugs depend on presence of other co-morbidities.

119-Answer: D.
Generally, patients suffering from DM type-2 are older than 35 years, whose diabetes discovered either by check up or during admission to hospitals for other reasons as most of them are asymptomatic. Almost all diabetics have the same complications in spite of early or late occurrence which depend on many factors including good diabetic control and presence of other risk factors. Most of diabetics have poor compliance with life style modification such as diet therapy and exercise which lead to poor control in about 50% of diabetics.

120-Answer: A
DM can lead to many complications .They could be classified into macro-vascular complications that affect(brain, heart and peripheral vasculature).Micro-vascular complications affect (retina, kidneys, and nerves).

121-Answer: A.
In every visit of diabetic to his doctor, we should ask about any new compliant, concern .We should assess his compliance with diet, exercise, drug use and self-monitoring.We should measure

his/her blood pressure, weight , examine feet . Urine analysis for albumin could be done at least one per year if the initial result was normal. If there was previous positive albuminuria we should assess him/her more frequently .

122-Answer: D
Hamza could have any of the mentioned diagnoses . However, Multiple myeloma is the most likely diagnosis in this patient(older age, bone pain, high ESR and osteolytic lesion) Other clinical features include: bone pain is the most common presenting complaint , anemia, bleeding tendency, high serum calcium , hyperviscosity and blurring of vision. Secondary infections could occur due to low immunity in those patients.

123-Answer: E.
Any two of the following three criteria are enough to diagnose multiple meyloma: plasma cell infiltration on bone marrow aspirate or biopsy, osteolytic bone lesions , monoclonal (M) bands on serum protein electrophoresis or Bence Jones protein in urine .

124-Answer: B
In patients suffering from Multiple meyloma , most of serum electrolytes are affected.
High calcium,high creatine due to renal insufficiency and high uric acid, low sodium. Magnesium is unlikely to be affected in those patients.

125-Answer: C.
Patients with this disorder may develop bleeding due to many causes.However, platelets dysfunction remains the most likely underlying causes.

126-Answer: E.
The mentioned chemotherapeutic agents could be used initially for management multiple meyloma except Bortezomib which is reserved for relapsing cases.

127-Answer: E.
This patient gave common clinical picture of malignancies. However, Hodgkin lymphoma remains the most likely diagnosis in this lady as this patient is young, presented with fever, night sweating ,and fatigue in addition to multiple rubbery cervical lymph nodes of significant size.

128-Answer: E.
To confirm lymphoma, it is essential to do excisional biopsy for definite diagnosis and histological staging also. Fine needle biopsy could be done but it can miss diagnosis . Bone marrow examination could be requested for staging but not for diagnosis purpose.

129-Answer: C.
As the histopathology of lymph nodes showed Reed Sternberg cells(pathognomonic) of Hodgkin lymphoma we should tell her father about this diagnosis. This tumor is one of the most disorders that have high curable and survival rate(80%). Prognosis depends on the extension of disease rather than the presence or absence of specific symptoms.

130-Answer: E
As mentioned in the answer of the previous question Hodgkin lymphoma has better prognosis with chemotherapy with 80% survival rate without re-occurrence . However, some patients may develop secondary cancers, premature cardiac death and infertility due to chemotherapy.

131-Answer: B.
This female who presented with gum bleeding and skin petechiae which were preceded by URTI go with idiopathicthrombocytopenic purpura(ITP) . Your immediate action in your practice is to ask for CBC in order to rule in or out low platelets count.

132-Answer: A
After confirmation the diagnosis, management of this patient should include oral steroids, intravenous immunoglobulin and close monitoring by hematologist . These types of patients if detected at family practice need to be referred immediately to hospital for specialized care .

133-Answer: A
ITP in adult is most likely to be due to auto-immune process in which platelets are destroyed by auto-antibodies in about 65% . ITP in adult shows chronic pattern which needs regular follow up and monitoring . Most of cases have platelets above 30.000 cell/ml and not need to have surgical splenectomy or blood transfusion which should be reserved for serious internal bleeding .

134-Answer: C.
Before splenectomy , patient should receive the following vaccines: H. Influenza vaccine, Meningococcal vaccine and , Pneumococcal vaccine in order to prevent the relevant infections.

135-Answer: B.

Based on the given information (age,affected joints, absence of systemic manifestations) , this patient most likely to have OA. RA is less likely due to age, distribution of the affected joints and absence of systemic manifestation. GA usually present with few joint involvement such as foot joints . PG is also unlikely as its diagnosis depending on examination joint aspirate under microscope.

136-Answer: C.
Diagnosing of OA depends mainly on history , physical examination and X-rays of affected joints. X-rays of joint will show osteophytes and narrowing the joint space. Joint aspiration is not recommended unless there is suspicion about other differential diagnosis such as gouty or septic arthritis , ESR and RF will be normal.

137-Answer: D.
There are many risk factors to develop OA. However ,the most common risk is advanced age . DM , obesity , trauma and sedentary life are other risk factors for OA.

138-Answer: B.
The drug of choice to be prescribed for this lady is Paracetamol. It is safe , cheap and could be tolerated . Aspirin and Indomethacin could be prescribed but with caution regarding their side effects in elderly . Intra-articular steroid injection is not the drug of choice and should be given if the initial treatment fail .It should be given under care of orthopedician .Topical capsaicin could be administered but has less potency than Paracetamol.We should not forget the non-pharmacological therapies such as weight loss, exercise , using canes and physiotherapy of the affected joints.

139-Answer: D.
Typical radiological changes in AO includes: narrowing the joint spaces ,bony sclerosis, subchondral cyst and osteophytes formation.Bony erosions are seen in RA but not in OA.

140-Answer: E.
This lady who presented with typical features of acute gouty arthritis should be managed as following: starting NSAIDs (Naproxen) is the drug of choice if it is not contraindication. If so start Colchicine .You should ask for serum urea , creatinine and uric acid level .This patient is obese, she should be advised to reduce her weight. Diet rich in protein(fish meat, beans) should be reduced . Asking for urgent foot X-rays will not change diagnosis or management in absence of trauma history.

141-Answer: C.
In order to confirm gouty arthritis, the most specific and diagnostic test is joint fluid aspirate for microscopy.

142-Answer: B.
The result of investigation showed positive birefingent rod shaped crystals confirm the diagnosis of psudo-gout . Negative birefingent long needl-shaped crystals is diagnostic finding in gout . Management of psudogout include: reduction of weight if patient is obese, rest, joint aspiration , giving NSAIDs and injection of local steroids if no response to the previous medications.

143-Answer: D.
Pseudogout occurs as a result of deposition of calcium pyrophosphate in the joints mainly knee joints.its incidence increases with age (25-50%) in those above 70 years old. Its symptoms improve with rest and using of NSAIDs . Its X-rays feature is chondrocalcinosis on the affected joints.

144-Answer: D.
This patients who had past history of sore throat one month before this visit and suffering from red color of urine , lower limbs edema and found to have hypertension is most likely to have post streptococcal glomerulonephritis(PSGN) which result from antibody-antigen reaction that occurred at glomeruli. Nephrotic syndrome could present in similar way but there is no urine discoloration . Peylonephritis presented with loin pain , fever and urine analysis will show pus cells,and WBC casts. Hypertensive nephropathy is associated with high serum creatinine and urea and some electrolytes disturbance such as high sodium and potassium .

145-Answer: C.
The definite diagnosis of acute glomerulonephritis is confirmed by renal biopsy. However, this procedure is rarely needed particularly in cases such as our patient who showed typical presentation of PSGN and asking for urine analysis may be adequate . Asking for ultrasound is indicated to find other pathologies and to know the size of kidney or associated pathologies.

146-Answer: D.
Management of patients with PSGN includes: salt and protein restriction, lowering high blood pressure, correcting electrolytes disturbance , and

rest. As the underlying cause is antigenantibody complex reaction there is no role for antibiotics. Regular monitoring of weight, blood pressure, urine output, urine analysis and complications such as pulmonary edema, acute renal failure is paramount .

147-Answer: D.
Relatives of patients suffering from PSGN are usually worry about prognosis. As physicians we should reassure them that most of patients recover completely. However, low percentage may develop chronic renal failure.The most common cause of ESRF is diabetes . Early use of antibiotics for bacterial sore throat will not prevent PSGN but can prevent rheumatic heart diseases. This patient needs follow up for expected complication such as renal failure and hypertension.

148-Answer: A.
Now the clinical pictures in this patient is going with progressive renal insufficiency . The immediate action by doctor is asking for renal function test and electrolyte. Due to high prevalence of diabetes in our community we should ask for plasma glucose also. Referring to nephrologists may be needed but not now as the real underlying cause is not yet identified . Asking for kidney X-rays will not help to identify the underlying causes . Advising patient to practice life styles modification is not wise action now as we do not know what is the underlying cause.

149-Answer: E.
With mentioned data, this patient had renal impairment and hypertension. General management should include restriction of diet rich in proteins and salts, staring her on anti-hypertensive agent preferable (calcium channel blockers) and to refer her to nephrologists for further care.

150-Answer: D.
As this patient had edema and gross proteinuria ,it is most likely to have nephrotic syndrome. Other diagnoses are less likely due to different manifestations . Peylonephritis is associated with fever, rigor, loin pain and WBC cast in urine. Acute renal failure manifested as high urea ,creatinine and disturbance of serum electrolytes. Glomerulonephritis is manifested by oliguria, hematuria ,hypetension, proteinuria ,edma and uraemia.

151-Answer: D.
To establish diagnosis of nephrotic syndrome, all the following criteria are present: proteinuria(>3.5 g/day) and hypoalbuminaemia(serum albumin<30 g/l). Other relevant investigation that should be carried out are: serum electrolytes, urea, creatinine, 24-hours urinary protein excretion, and liver function test for albumin, in addition to urine analysis and lipid profile. Kidney ultrasound is not essential to establish diagnosis .

152-Answer: C.
Management of patients with nephrotic syndrome include: rest, restriction of salts and diet rich in protein, fluid restriction. Drug therapies include: oral steroids, diuretics, ACE inhibitors. Patients should be evaluated and followed by nephrologists to measure the response and to do the appropriate interventions if initial management failed. There is no indication to manage lipid abnormality using lipid lowering agent as it will be corrected with management the original problem.

153-Answer: C.
This lady is most likely to have UTI as she had dysuria . Vaginitis and cervicitis present with vaginal discharge and itching . urethritis presents with dysuria but no nocturia while salpingitis present with vaginal discharge ,lower back pain, lower abdominal pain and sometimes fever.

154-Answer: B.
The most common cause of UTI is E. coli(70%), followed by proteus (12%).

155-Answer: A
In those patients presented with typical features of UTI such as this lady, it is wise and cost-effective to ask for urine culture and sensitivity , start three days course of antibiotics and to give appointment after 48 hours in order to see the results of urine analysis , C/S and to evaluate the response of the patient to therapy. Prescribing antibiotics for more than three days in uncomplicated UTI is not recommended as it is effective and less side effect compared to one week duration of antibiotics use.

156-Answer: D.
Indications for urine C/ S include any male patient, children, relapse UTI , re-infection UTI , elderly with dysuria, in addition to those patients who did not respond to three days course of antibiotics.

157-Answer: E.
All those individuals mentioned in the question are at high risk to develop asymptomatic UTI

except those use IUCD .Pregnant ladies should be treated .

158-Answer: B.
This patient has typical features of hyperthyroidism as a result of Grave's disease. Hashimoto thyroditis causes hypothyrodism rather than hyperthyroidism . Patients with Phemochromocytoma presented with sweating, palpitation, pallor and hypertension , weight loss, symptoms and signs occur in episodic manner and eyes are normal. Toxic nodular goiter and secondary hyperthyroidism are less common and share some features of hyperthyroidism but eyes are not involved as in this patient . In Grave's disease the thyroid gland is generally shows diffuse enlargement while in nodular goiter some parts of thyroid gland are enlarged.

159-Answer: A.
TSH is a good test for screening thyroid diseases. However, T3 &T4 are the confirmatory diagnostic tests for patient with Grave's disease.

160- Answer: E.
All mentioned therapies could be used in management Grave's disease . However oral steroid is reserved for patients with severe Grave's ophthalmopathy who may deteriorate after radioactive iodine therapy . Beta blockers are used for reliving tachycardia. While anti-thyroid drugs are used to inhibit the synthesis of thyroid hormones .Radioactive iodine therapy could be given to young patients, those who relapse and those did not respond to anti-thyroid drugs. Subtotal thyroiectomy is the treatment of choice for pregnant patients and those whose thyroid gland showed solitary nodule or develop reactions to anti-thyroid drugs or refuse radioactive iodine therapy .

161-Answer: D.
These features suggest that Aisha developed hypothyrodism . Other mentioned diagnoses should be considered . There is no major criteria to diagnose depression except weight gain and fatigue .The only clinical picture of anemia is pallor which is not specific or sensitive for such diagnosis. Nephrotic syndrome is characterized by proteinuria ,hypoalbuminemia and edema.Chronic fatigue syndrome is unlikely as it should persist for six months to consider this diagnosis.

162-Answer: C.
This patient suffers from hypothyrodism which could be confirmed by asking for thyroid stimulating hormone level(TSH) and T3,T4..

163-Answer: E.
In spite of that Hashimito thyroditis is the most common cause of hypothyrodism , the use of anti-thyroids agent is the underlying cause in this patient .

164-Answer: D.
After confirmation of diagnosis in this patient as hypothyrodism, she should be seen by endocrinologist in order to start her on thyroxine and for close follow up for the first few months. Afterwards she could be followed up by her family physician.

165-Answer: B
The best test used to monitor response to thyroxine replacement therapy is TSH . Initially we can ask for it every 6-8 weeks

166-Answer: C.
Fine needle aspiration biopsy remains the most important diagnostic test that should be carried out for patients present with thyroid nodule. It will help us to differentiate between malignant and benign nodules and guides us concerning the next step of management .Thyroid function test help us to know if this nodule is associated with hyper/ or hyopthyrodism. Ultrasound help use to determine the size and consistency of the nodules .Thyroid scan has limitation to diagnose thyroid nodules compared to fine needle biopsy. Excesional biopsy is not recommended in diagnosis of thyroid nodules.

167-Answer: B.
These manifestations are going with hyper-production of growth hormone as a results of pituitary adenoma. Other clinical features are: deep voice, polyuria, muscular and bone pain, carpal tunnel syndrome, and odema. The other mentioned diseases could share some clinical features such as weight gain, hypertension(Cushing syndrome), sweating and hypertension(Pheochromocytoma), fatigue and sweating(hyper-thyrodism).

168-Answer: B.
Asking for growth hormone is the initial step to diagnose acromegaly .To know the underlying cause, you should ask for Pituitary fossa MRI .Other tests include: prolactin level, plasma glucose, and visual field examination.

169-Answer: C.
Un-treated patients of acromegaly may develop serious complications such as: coronary heart diseases, heart failure, hypertensive complications. Management include surgery, external beam radiotherapy and bromcriptine , growth hormone

receptor blockers. Chemotherapy is not considered an option of therapy in such patients.

170-Answer: D.
This patient is most likely to have hypoadrenalism (Addison disease) that could be caused by destruction of adrenal cortex (autoimmune disease) and tend to adrenal insufficiency. Clinical features include: weight loss, hyperpigmentation , low blood pressure, fatigue, depression and loss of appetite. Some patients attend to Emergency department complaining of vomiting, abdominal pain, generalized weakness, and hypovolemic shock(Addisonian crisis). Dizziness in this patient is most likely due to hypotension resulting from salt and fluid loss from the body . Hypersecretion of ACHT due to low cortisol will tend to stimulation of mealnocyes which tends to (hyperpigmentation of the skin creases and buccal mucosa).

171-Answer: A
Typically patients with Addison disease have high potassium, low sodium , hypoglycemia and high urea , serum calcium may be high.

172-Answer: C.
Most of cases suffering from Addison disease (90%) are caused by auto-antibodies . Uncommon causes include: bleeding, TB, surgical removal of adrenal cortex.

173-Answer: E.
Patients suffering from Addison disease need long term management using hydrocortisone and fludrocortisone to maintain serum cortisol and electrolyte within normal limits.

174-Answer: E.
Differential diagnosis of excessive urination include diabetes mellitus and diabetes insipidus , high serum calcium , low serum potassium and psychogenic , cold weather ,anxiety and intake diuretics may cause this compliant.

175-Answer: B.
This patient who found to have low potassium and slightly high sodium is most likely to have adrenal gland adenoma as it is the most common cause(60%) of hyperaldosteronism (Conn's syndrome). Other causes include adrenal gland hyperplasia, or tumor . TB can cause gland destruction (hypoaldosteronism) while parathyroid adenoma could cause high parathyroid hormone but not hyperaldosteronism.

176-Answer: C.
In this patient we should investigate her to find out the real underlying cause .To differentiate between adenoma and hyperplasia we should ask for MRI or CT scan. In the case of hyperplasia we manage by aldosterone antagonist(sprionolactone) while in the case of adenoma surgical removal is the option of choice after correction of electrolytes and hypertension if any .In this patient where the most common underlying cause is adenoma , adrenectomy is the best option of management.

177-Answer: E.
This patient with this clinical features is most likely to suffer from hyperparathyroidism which could be primary, secondary or tertiary .Those clinical features are most likely due to high calcium level in the serum. Other medical problems could share general clinical picture of hypercalcemia such as fatigue and polyuria

178-Answer: B.
The most common causes of clinical hypercalcemia are parathyroid gland adenoma, hyperplasia and then carcinoma .Other causes include: malignancies , drugs, Vitamin-D hyper-vitaminosis and long term immobility.

179-Answer: C
Before starting any therapy we should confirm the definite underlying cause. Choice of management depends on the severity of symptoms and the underlying pathology. In this patient who is most likely to have parathyroid gland adenoma we should normalize his serum calcium, and then proceed for surgical removal of adenoma . There is no role for chemotherapy , radiotherapy or steroid in treating this patient .

180-Answer: E.
This lady who had similar attacks that resolved without any sequels and involved many different part of the body(eyes, peripheral sensory nerves, and muscular weakness) and affect middle age female are going with multiple sclerosis more than the other listed problems. In multiple sclerosis there are plaques of demyelination that could affect preventricular white matter, brainstem, cerebellum , cervical spinal cord but not the peripheral nerves. Most of patient show relapsing and remitting features(85%) while 15% show progressive features. Blurring of vision and eye pain occur due to optic nerve inflammation (neuritis) which is manifested as disc swelling and pallor. Differential diagnosis of MS are many and include: Behcet's disease ,SLE , herniated disc, secondary tumor metastasis, lymphoma, multiple strokes, and HIV encephalitis.

181-Answer: B

In order to get the definite diagnosis you would ask for spinal cord and brain MRI which will show discrete area of demyelination and edema around the ventricles and brain stem(plaques).MRI is highly sensitive and will distinguish between old and new lesions. Examination of CSF will show pleocytosis, increase in total proteins in most of the cases(90%) while .Visual evoked response could show abnormal findings in the majority of patients (80%)

182-Answer: B.
Multiple sclerosis is idiopathic disease .It was found to be high in incidence among females, white, those with high socioeconomic status, and live in the northern altitude. Trauma and infections could trigger attacks. There is no relationship between sexual orientation and MS.

183-Answer: D.
Acute management of Fatma should include IV steroids and treating the underlying trigger factor such as infections if any. Long term management include interferon , Methotrexate and Mitoxantrone which are immuno –suppressive agents).There is no role for radiotherapy. Psychosocial support and exercise are recommended as a part of long term comprehensive care of such patients suffering from chronic diseases such as MS.

184-Answer: D(see above answer).

185-Answer: D
This patient showed many features suggesting Parkinsonism . Major depression even common in elderly but its features do not include movement disturbance as in this patient . Mutiple sclerosis present with remitting and relapsing features , eyes clinical findings , numness, paraesthesia . Hyopthyrodism is common among elderly but the clinical features include constipation, slow movement , cold intolerance, dry skin, slow pulse, edema, memory impairment .Cerebral infarcts is less likely in this patient as there was no significant history of previous strokes or medications.

186-Answer: C.
The underlying cause of parkinsonism is unknown , however the underlying pathology affect the dopamine containing neurons of the substantia nigra

187-Answer: E.
In patient with mild parkinsonism as our patient it preferred to start him on Selegiline which is selective MAO inhibitor .It has mild dopaminergic effect .

188-Answer: C.
Essential tremor is fine, symmetric and rapid that occurs during action ,it is not associated with muscular rigidity .It could be relived by alcohol and beta blockers. It runs in families .

189-Answer: E
For any patient from Tehama , you should consider the following diagnosis : Malaria, Leshmania and Brucellosis . However, you should not forget the other causes of long lasting fever such as TB, Malignancies , HIV and connective tissues diseases. History should explore many issues including dietary habits, contacts with animals and flies in addition to personal and family history of similar attacks . Almost all desert people use traditional and herbal medicines which should be asked for . But in the cases of fever such question will not help to reach the diagnosis as the other questions .

190-Answer: D.
For any patient come from Tehama we should consider all possible diagnosis. However, malaria, brucellosis and leshmanisis are considered the most common cause of fever of long duration and these three problems should excluded before going for further invasive investigations . We should ask for brucellosis serology, blood culture for brucellosis and blood film for malaria.

191-Answer: C.
Most of infectious diseases are similar in their clinical features .However, fever is considered the most common predominant feature including brucellosis. It was found that fever which is undulant in nature is present in almost all patients with brucellosis lower back pain is another common feature of brucellosis(60%).

192-Answer: D.
Therapeutic options for treatment Brucellosis include: Rifampicin or streptomycin and doxycyclin for six weeks .Tetracyclin could be used but not during pregnancy or childhood (less than seven years) .Cotrimexazole(Bactrim) could be used but the relapse occurs in about one third of patients.

193-Answer: C.
Patient is unlikely to have chronic bronchitis as the duration of this complaint is less than two years. Also Lung cancer is less likely as this patient is not smoker, no weight loss. Brucellosis could be ruled out as the typical features is not

associated with lung findings such as creps and bronchial breathing. Pneumonia is unlikely due to long duration of complaints . TB of the lung is the most likely diagnosis as it presents with fever, cough, night sweating and consolidation of the lung which manifested with creps and bronchial breathing sound in the right upper zone .

194-Answer: C.
Although all the above mentioned investigations are routinely asked , the most important investigations that we should ask for are chest X-rays and sputum for Acid Fast Bacilli (AFB).

195-Answer: E.
Before initiation Anti-TB agents we should ask for CBC, liver,kidney function tests and Uric acid for two reasons: firstly; to ensure that there is no contraindications for such medications and secondly due to have background lab. Results that you will use for comparison with such results during follow up and monitoring . Side effects are several and includes hepatitis, renal failure, hyperuricemia , optic neuritis, thrombocytopenia, urine discoloration , nephrotoxicity and ototoxicity.

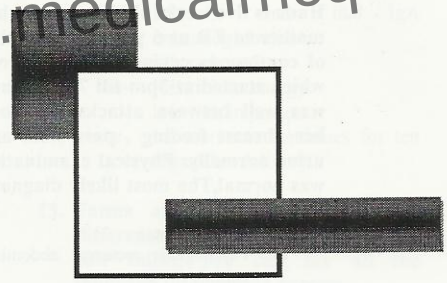
196-Answer: D.
Anti-TB agents are associated with many side effects as following: hepatitis and elevated liver enzymes, dizziness (INH), hepatitis, high liver enzymes and low platelets (R), Hepatitis, skin rash and high serum uric acid(P), Optic neuritis, decrease visual acuity and loss green-red color(E), nephrotoxicity and ototoxicity (S).

197-Answer: C.
In order to eliminate TB from the body and to minimize drug resistance, the initial phase of management(Anti-TB) should consists of four drugs .This phase should be continued for eight weeks .

198-Answer: D
After treating Nora for two month ,it is most likely to have negative sputum for AFB as about 85% will have negative result after such duration of therapy . If Nora still have positive sputum for AFB she should continue therapy for another month .

199-Answer: B.
The drugs than could cause hepatitis and skin rash and itching are Rifampicin and Pyrazinamide . Other side effects are mentioned in previous question.

200-Answer: D.
As this patient on (Anti-TB agents) which cause hepatitis , it is not essential to ask for hepatitis serology as there no fever and other features of infective hepatitis. As the liver enzymes are very high the relevant Anti-TB drugs (INH and RIF) should be discontinued .



Chapter Five

Pediatrics

1. **Ali was born last week as full term and normal vaginal delivery . His birth anthropometrics were as following: height=50cm,weight=3.5kg,HC=35 cm. After three months his expected anthropometrics will be as following:**
   a- Wt=5.75kgs,ht=58cm,Hc=38cm.
   b- Wt=5kgs, ht=52cm,Hc=35cm.
   c- Wt=5.2kgs, ht=53cm,Hc=35cm.
   d- Wt=6.5kgs, ht=58cm,Hc=38cm.

2. **After one year Ali's anthropometric measures will be as following:**
   a- Wt=11.3kgs,ht=75cm,Hc=47cm.
   b- Wt=15.5kgs,ht=110cm,Hc=50cm.
   c- Wt=13kgs, ht=108cm,Hc=51cm.
   d- Wt=10.5kgs, t=105cm,Hc=47cm.

3. **Ali came to your clinic after four years of his birth, his height is expected to be:**
   a- 120cm.
   b- 100cm.
   c- 115cm.
   d- 110cm.

4. **Ali's anterior fontanel is expected to close at:**
   a- 7-9 month of age.
   b- 9-12 month of age.
   c- 12-15 month of age.
   d- 9-18 month of age.

5. **Ali is expected to sit without support at:**
   a- Three months.
   b- Four months.
   c- Six months.
   d- Five months.

6. **Red flags and risk factors for child abuse include all the following <u>except</u>:**
   a- Poor income of family.
   b- History of drug abuse in family.
   c- Child with physical impairment.
   d- Quick medical seeking by parents.
   e- Discrepancy between history and physical findings.

7. **When Ali was two months old he was brought by his mother who told you that Ali suffered from abdominal pain since he was six weeks old, you wanted to tell her about infantile colic as the most likely cause of this complaint .Which one of the following statements you would not tell her regarding infantile colic?**
   a- Infantile colic is not common during infancy.
   b- Cause of infantile colic is unknown.
   c- Infantile colic is most likely to disappear after three months old.
   d- Aspirin should not be used to relelve infantile colic.

8. **Huda is five weeks old brought by her mother to ER at 6 pm complaining of continuous crying since one week which started at 3pm till 7pm . Huda was well between attacks, she took her breast feeding , pass stool and urine normally. Physical examination was normal,The most likely diagnosis is:**
   a- Otitis media.
   b- Psychogenic recurrent abdominal pain.
   c- Irritable bowel syndrome.
   d- Early gastroenteritis.
   e- Infantile colic.

9. **The next step in management of Huda would be:**
   a- Asking for CBC, electrolytes.
   b- Asking for Abdominal X-rays.
   c- Prescribing Antibiotics for one week.
   d- Giving Hyoscine bromide IM stat.
   e- Explaining the condition to mother and reassure her.

10. **Which of the following drug/s was/were approved to mange Huda condition?**
    a- Aspirin.
    b- Hyoscine bromide.
    c- Phenergan.
    d- All above
    e- None above.

11. **Asma is 32 years old presented to ER in labor . She delivered 3.7 kg male baby . She did not receive any vaccine and her immunity status concerning hepatitis-B is unknown. You were the physician on.What would be your action?**
    a- To give her and her baby hepatitis-B vaccine .
    b- To give her baby hepatitis-B vaccine and Hepatitis-B immunoglobulin(HBIG).
    c- To give her baby hepatitis-B vaccine and send her blood sample for HbsAg and act depend on the result .

d- To give her baby HBIG and send her blood for HbsAg.

12. Fatema is a 23 years old Saudi female attended for Ante-natal care , She asked you about colostrums, you can say all the following information for her about colostrum except:

a- It is rich in IgA immunoglobulin.
b- It is rich in fats.
c- It is rich in energy.
d- It is rich in proteins.
e- Its secretion continues for ten days after delivery.

13. Fatma also asked you about the differences between breast milk and cow milks, you can say all the following information except:

a- Breast milk has lower protein content than cow milk,
b- Breast milk has similar calories as cow milk.
c- Breast milk contains higher carbohydrate content than cow milk.
d- Breast milk contains lacto albumin while cow milk contains casein.

14. Fatma asked you also about the cancers that could be reduced by practicing breast feeding , you can say that all the following cancers could be reduced by such practice except:

a- Breast cancer.
b- Ovarian cancer.
c- Liver cancer.
d- Uterine cancer.

15. Breast feeding has protective effect against all the following health problems But:

a- Obesity.
b- Diabetes Mellitus type -1.
c- Skin allergy.
d- Hypertension.

16. The most common cause of short stature is:

a- Familial
b- Hypothyroidism.
c- Constitutional.
d- Growth hormone deficiency.

17. The best method to differentiate between familial and constitutional short statute is:

a- Observation growth chart .
b- Asking for growth hormone level.
c- Measuring parents height.
d- Asking for hands X-ray to know the bone age.

18. Delayed bone age is observed in all the following conditions except:

a- Familial short stature.
b- Constitutional short stature.
c- Hypothyroidism.
d- Growth hormone deficiency.

19. Halima is a 32 years old Saudi female who delivered a full term baby. She attended to your clinic complaining of right breast pain, fever for two days. Physical examination revealed that her temperature was 38.7C,tender and swollen right breast . The most likely underlying causative agent is:

a- Staphylococcus Epidermis.
b- Staphylococcus Aureus.
c- Streptococcal pneumoniae..
d- E.coli.

20. Management of Halima should include all the following measures except:

a- Start antibiotics.
b- Stop breastfeeding.
c- Prescribe Paracetamol .
d- Advise using hot compress packs.

21. Two weeks later she came back to you and asked about " the indications of adequate breast feeding" of her baby. You can tell her that the best indicator is:

a- Well baby sleeping.
b- Gaining weight according to growth chart.
c- Passing 6-8 motions per day.
d- Stopping feeding while the breasts still have milk.

22. Three months later, she called you by telephone asking about the risks of sudden infant death syndrome (SIDS). You can tell her that all the following can increase the risk of SIDS except:

a- Smoking in house.
b- Sleeping of child alone in bed.
c- Sleeping on stomach.
d- Using pacifier.

23. **Azmi is a three years old Saudi Male child presented with his mother who told you that her son was well till three days ago when he started to have running nose and cough, today his cough worsen and his breathing become difficult. There is no history of fever . Physical examination revealed that he was looked unwell with respiratory distress , stridor at rest, RR=30/min, Temp=37.8C, there was no cyanosis or intercostals retraction,there was no rhonchi or creps or breathing sound, heart sounds were normal and pulse=110bpm.The most likely diagnosis is:**
    a- Bronchitis.
    b- Viral pneumonia.
    c- Bronchiolitis.
    d- Croup.
    e- Epiglotitis.

24. **Management of choice for this child would be:**
    a- I.V antibiotics.
    b- Nebulized budesonide).
    c- Salbutamo inhaler.
    d- Inhalation of moist warm air .

25. **Azmi's mother asked you about the nature and prognosis of this problems, your response would be:**
    a- This condition is common in this age , caused by viral agent , will improve within couple of days without complications.
    b- This condition is common in this age, caused by exposure to allergens, will improve within few days and may relapse if re-exposed to allergens.
    c- This condition is caused by viral agent, affecting the small airway tract and will improve without complications.
    d- This condition could be caused by allergens , viruses and should be investigated in order to know the definite cause.

26. **Osama is a 9 months old Saudi child brought by his mother complaining of fever and ear pain for the last two days, there was no ear discharge. Physical exam revealed Temp= 39C, red immobile tympanic membrane which suggest acute otitis media . Which of the following statements is false regarding this condition?**
    a- The most common bacterial organism causing otitis media is streptococcus pneumoniae.
    b- The drug of choice to treating this child is Amoxicillin.
    c- Antibiotic ear drops show good symptomatic relive in management of otitis media.
    d- If Osam develop three or more episodes during the coming six month , this condition is known as recurrent otitis media.
    e- Duration of prophylactic antibiotics for recurrent otitis media should not exceed six months.

27. **Which one of the following is not known as extra-cranial complication of otitis media?**
    a- Hearing loss.
    b- Facial palsy.
    c- Meningitis.
    d- Cholesteatoma.
    e- Labyrinthitis .

28. **Osama developed four attacks of otitis media during the past five months , You diagnosed him as recurrent otitis media . His mother asked about some aspects of this condition. Which one of the following statements you could not tell her ?**
    a- Osama needs half-strength of amoxicillin as prophylactic regimen.
    b- Antibiotics ,myringotomy and ventilation tube have similar prophylactic effect on recurrent ototis media.
    c- Antibiotics prophylaxis should not prescribed for more than four weeks.
    d- There is no role for anti-histamincs in management of recurrent otitis media.

29. **Fawaz is a 3 years old Saudi child brought by his mother with cough, running nose, and fever for the past two days. Physical examination revealed the following findings: child was looked well, temp=38.3C, running nose, Ears, Eyes, Chest, abdomen, Skin were all normal.Her mother asking you what the most likely causative agent of this problem for her child, your response would be:**
    a- Adenovirus.
    b- Echovirus.

c- Rhinovirus.
d- Influenza virus.
e- Parainflunza virus.

30. Management of this child includes all the following except:
a- Prescribing Paracetamol.
b- Advise regular nose cleaning.
c- Prescribe Vitamin-C.
d- Prescribe normal saline nasal drop.

31. The most effective measure to prevent the condition from infecting Fawaz's family members is:
a- Drink juices rich in vitamin-C.
b- Avoiding contact with affected individuals.
c- Wearing mask face.
d- Washing hands.
e- Vaccination.

32. Ala is a 5 years old Saudi child presented with her father to your clinic, she had cough, sore throat, and fever for the last three days . She was looked well, temp=38.5C, ENT= mild throat congestion, ears were normal, anterior cervical lymph nodes were not palpable , chest , abdomen, limbs were all normal. The most likely diagnosis is:
a- Croup.
b- Acute bronchitis.
c- Rhinitis.
d- Upper Respiratory Tract Infection (URTI)

33. Your next step in management Ala would be be:
a- Asking for throat swab and wait for its results.
b- Referring Ala to ENT specialist.
c- Prescribing Amoxycillin for one week.
d- Reassuring her father, prescribe Paracetamola and discharge the child.

34. One month later, Ala came with her mother complaining of sore throat, fever for the past two days. She was looked ill, temp=39.3C, Throat was very congested , her upper anterior cervical lymph nodes were enlarged and tender , rest of examination was normal. The most likely diagnosis is:
a- Viral Pharyngitis.
b- Streptococcal Pharyngitis.
c- Infectious mononucleosis.
d- None specific Pharyngitis.

35. The next step regarding management this child is:
a- Asking for rapid streptococcal test and treat according to the result.
b- Referring him to pediatrician.
c- Prescribing Paracetamol PRN and Penicillin-V for ten days
d- Reassuring her mother, give Paracetamol&give appointment within 48 hours.

36. Results of investigations revealed that this child had GABHS. Which one of the following statements is false concerning early treatment of GABHS?
a- It will decrease its virulence and severity.
b- It will decrease the duration of symptoms.
c- It will protect against Rheumatic fever.
d- It will protect against post-streptococcal glomerulonephritis.

37. Ahmed is a 7 years old Saudi child brought by his mother to your clinic . He had fever, cough for the last twenty-four hours. He was looked ill, RR=30/min, Temp=39.3C, pulse=102 bpm , no cyanosis or pallor, ENT =Normal, Chest exam revealed stony dullness in the left upper zone and scattered creps. The next step in management of this child would be:
a- Referring the child to hospital.
b- Giving antipyretic and asking for Chest-X rays.
c- Prescribing antibiotics and see the patient after 48 hours.
d- Asking for Chest –X-rays and CBC .

38. The most common cause of the condition affecting Ahmed is:
a- Adeno-virus.
b- Para-influenza virus.
c- Respiratory synecial virus.
d- Influenza virus.
e- Streptococcal pneumoniae.

39. Risks of occult bacterimeia in children include all the following except:
a- Temperature of 40C.
b- WBC< 5000 cell/ml.
c- WBC >15000 cell/ml.
d- Three weeks old infant .
e- Low birth weight .

40. **One of the following statements about bacteremia is false:**
    a- Most of cases of bacteremia are caused by H. Influenzae .
    b- The most common condition associated with bacteemia is acute otitis media.
    c- Temperature of >=40C is a risk factor for bacteremia.
    d- The incidence of bacteremia in children ranges (1.6-1.8%).
    e- Aministration of Hemophilus influnzae vaccine tends to reduce incidence of occult bacteremia .

41. **Wajdi is a 2 years old Saudi child presented to ER by his mother who told you that her son had 3-5 loose motions daily for the past three days which is watery in nature, no blood or mucous, no other complaint. Past history was unremarkable. Physical examination revealed no fever, no signs of dehydration, ENT, CVS, Chest and abdomen were normal. The next step in management this child would be:**
    a- Asking for stool analysis and serum electrolytes.
    b- Admitting this child to hospital and give IVF accordingly.
    c- Prescribing oral solution and Cotrimexazole for three days.
    d- Reassuring mother, prescribing oral re-hydration solution(ORS), and give appointment within 48 hours.

42. **The most common agent causing acute gastroenteritis is:**
    a- Adenovirus.
    b- Echovirus.
    c- Rotavirus.
    d- Astrovirus.
    e- Norwalk virus.

43. **Vaccine is available for one of the following viruses:**
    a- Adenovirus.
    b- Echovirus.
    c- Rotavirus.
    d- Astrovirus.
    e- Norwalk virus.

44. **The WHO standard formula for ORS composed of :**
    a- Na(90mEq/l,K=(20mEq/l, Cl=(80mEq/l,HCO3=30mEq/l, Glucose=2 g/l
    b- Na(110mEq/l,K=(20mEq/l, Cl=(80mEq/l,HCO3=20mEq/l, Glucose=3 g/l
    c- Na(90mEq/l,K=(30mEq/l, Cl=(80mEq/l,HCO3=40mEq/l, Glucose=2 g/l
    d- Na(100mEq/l,K=(20mEq/l, Cl=(80mEq/l,HCO3=30mEq/l, Glucose=4 g/l

45. **Which one of the following statements about bacterial gastroenteritis in children is false?**
    a- Most of cases presented with loose motion mixed with blood.
    b- The most common causative agent is Campylobacter Jejuni.
    c- Most of cases recover without antibiotics.
    d- Stool culture should be done if the loose motion associated with blood , fever or tenesmus.

46. **The least likely organism causing bloody diarrhea in children is:**
    a- Salmonella.
    b- E.coli.
    c- Shigella.
    d- Yersinia enterocolitis.
    e- Campylobacter jejuni.

47. **Which one of the following statements about antibiotics associated diarrhea is false?**
    a- Most cases are caused by Ampicilin.
    b- Most cases resolve on stopping antibiotics.
    c- Treatment of severe cases include Metronidazole.
    d- Pseudo-membranous colitis is a common complication.

48. **Hassan is a ten years old Saudi male child presented by with his father to your practice complaining of recurrent attacks of abdominal pain for two days. Reviewing his medical record revealed that he had similar three attacks during the last six months. Detail history indicated that this pain is colicky in nature, started around umbilicus ,continued for several hours and then gradually disappeared .There was no vomiting, diarrhea, fever, or weight loss ,He is in the fourth grade of elementary school with excellent performance , no behavioral changes observed by his family or teachers. Physical examination revealed normal**

findings. The next step to manage this child would be:

a- Asking for complete laboratory investigations including(CBC, urine and stool analysis, abdominal plain X-rays.
b- Reassuring his father and giving appointment after one month.
c- Referring him to pediatrician.
d- Prescribing anti-spasmodic as needed and giving open appointment .

49. The most likely diagnosis in this child is:

a- Irritable bowel syndrome.(IBS)
b- Giardiasis.
c- Inflammatory bowel diseases.
d- Lactose intolerance.
e- Recurrent abdominal pain syndrome.

50. Results of investigations that were performed for Hassan were normal, next step expected to be done for Hassan would be:

a- Repeating investigations.
b- Referring Hassan to psychiatrist
c- Explaining the nature of the problem and the treatment options for Hassan and his father .
d- Prescribing sedatives and give an appointment after one month.

51. Which <u>one</u> of the following statements about the Hassan's problem is <u>false?</u>

a- Children with this condition have poor school performance compared to healthy children.
b- Boys and girls are both equally affected.
c- Sedatives and anti-spasodics are effective and safe in management this problem.
d- This condition affects about 10% of children.
e- Its peak of occurs in children at 10-12 years old.

52. Which one of the following statements about abdominal pain in children is <u>false?</u>

a- The most common cause is gastroenteritis.
b- The most common cause during infancy is infantile colic.
c- Tumors are rare causes.
d- The most common serious cause is acute appendicitis.
e- The most common cause during school age is recurrent abdominal pain syndrome.

53. Hatem is a 12 years old Saudi male presented to your clinic suffering from right groin pain and limping for the last two days . There was no associated fever. Physical examination revealed right hip tenderness,, hip is held in abduction and external rotation and painful internal rotation, sensation is normal. The most likely diagnosis is:

a- Osgood-Schlater disease.
b- Perth's disease.
c- Slipped capital femoral epiphysis.
d- Septic arthritis.
e- Toxic transient synovitis.

54. Your immediate action to manage this patient would be :

a- Asking for ESR, CBC and hip X-rays.
b- Reassurance, Paracetamol and appointment within one week.
c- Referring the patient to orthopedician.
d- Asking for hip X-rays and act accordingly.

55. The management of choice for Hatem will be:

a- Prescribing analgesics and follow up.
b- Bracing or traction.
c- Surgical fixation.
d- Splinting.
e- Casting.

56. Nahed is an eight years old Saudi girl brought by her mother to your clinic complaining of left hip pain and limping for ten days , there was no fever, no other joints pain. Physical examination revealed the following findings: tender left hip area and limping and restriction all movements at left hip joint. This girl most likely to have:

a- Osgood-Schlater disease.
b- Perthes disease.
c- Slipped capital femoral epiphysis.
d- Septic arthritis.
e- Toxic transient synovitis.

57. Khaled is 15 years old Saudi pupil presented to your clinic complaining of right knee pain that increased by running and going up and down stair

and kneeling for the last five days. There was no fever, no history of trauma or other joint problem. Physical examination revealed tenderness and swelling over the right tibial tuberosity. The most likely diagnosis is:

a- Osteoarthritis.
b- Synovitis.
c- Patellofemoral syndrome.
d- Osgood-Schlater disease.
e- Chondromalcia.

58. To confirm diagnosis you should ask for :

a- Knee arthroscopy.
b- Knee ultrasound.
c- Knee X-rays.
d- Knee fluid aspiration for crystal microscopy and gram stain.

59. Management of Khaled would be:

a- Prescribing local steroid injection.
b- Prescribing oral NSAIDs.
c- Advising to mimize physical activity.
d- Referring for knee physiotherapy.

60. Khaled asked you about the management and prognosis of his problem, you could say that:

a- He needs surgery in order to get rid of this problem.
b- You are not sure about diagnosis and he should wait for few days to confirm the diagnosis.
c- This problem is self-limited and it will take few month to return to normal situation.
d- The prognosis of this problem could not be expected now.

61. Hamed is a 12 years old Saudi pupil male presented to your clinic with running nose for four days. There were no other associated symptoms . Physical examination revealed the following findings: He was looked well, temp=36.7C, mild congestion of nasal mucosa, ear, throat, chest, heart and abdomen were normal. Considering the comprehensive approach you should do all the following except.

a- Ask Hamed about his performance in school.
b- Measure Hamed's blood pressure and weight .
c- Educate Hamed about healthy life styles.
d- Revise Hamed's file for immunization update
e- Ask Hamed about addiction.

62. Three weeks later, he came back complaining of sore throat for three days, you did comprehensive physical examination , you noticed that pubic hair did not grow yet. Your appropriate action would be:

a- Referring him to pediatrician.
b- Taking complete developmental and sexual history.
c- Asking for FSH,LH, Testosterone levels and give appointment after one month.
d- No action taken as this finding is expected at his age.

63. The most common morbidity affecting Saudi adolescents is:

a- Gastroenteritis.
b- Acute respiratory infections.
c- Depression.
d- Acne.

64. The most common cause of mortality among Saudi adolescents is:

a- Cancer.
b- Infections.
c- Heart diseases.
d- Accidents.

65. Sami is a 5 years old Saudi male child who was brought by his father to your clinic telling you that his son wet his bed for the last four months. Detail history was normal. Clinical examination was normal. The most likely diagnosis is:

a- UTI.
b- Diabetes mellitus.
c- Diabetes insipidus.
d- Enuresis.

66. The most important single test that should be asked for Sami is:

a- Blood Glucose.
b- Urine analysis.
c- Kidneys, ureters and bladder plain X-rays.
d- Kidney and bladder ultrasound.

67. The treatment of choice for Sami would be:

a- Cotrimexazole for one week.
b- Insulin.
c- Diet therapy.
d- Behavioral modification therapy.

68. **Which one of the following statements about allergic rhinitis is false?**
    a- Otisi media is a common complication of allergic rhinitis.
    b- The drug of choice to manage allergic rhinitis is intranasal steroids.
    c- One in every ten patients suffering from allergic rhinitis will develop bronchial asthma.
    d- Patients with allergic rhinitis are at high risk of naso-pharngeal cancer.

69. **Long term use of topical nasal decongestant in management of allergic rhinitis causes one of the following conditions:**
    a- Insomnia.
    b- Sedation.
    c- Headache.
    d- Rebound nasal congestion.

70. **Salah is a six months old infant who was brought by his mother to your office stating that her child had diaper rash for the last ten days . Physical examination revealed erythamatous scaly lesions, fissures, and erosions around his genitalia . You noticed that the diaper was dirty and old, skin folds were normal. The most likely diagnosis is:**
    a- Fungal dermatitis.
    b- Atopic dermatitis.
    c- Irritant contact dermatitis.
    d- Bacterial dermatitis.

71. **The treatment of choice for this child would be:**
    a- Ketoconazole ointment.
    b- Selenium sulfide ointment.
    c- Fucidic acid ointment.
    d- Hydrocortisone ointment.

72. **The most likely underlying cause of Salah's condition is:**
    a- Infrequent change of diapers.
    b- Allergy to cow milk.
    c- Fungal infection.
    d- Bacterial infection.

73. **Salwa is a 4 years old Saudi girl brought by her father to Emergency department at 9:00pm complaining of generalized body aches and fatigue for the last three days. , There was no fever. Details history revealed that Salwa came from Jazan to Aseer four days ago to spend summer vacation there. Physical examination showed that Salwa was afebrile, looked ill, in pain, pale and jaundice , most of her joints were tender,no organomegaly. The immediate management of Salwa should include all the following <u>except:</u>**
    a- Giving Oxygen.
    b- Giving I.M Pethidine.
    c- Asking for CBC and liver function test.
    d- Asking for Blood cross matching .
    e- Asking for blood transfusion.

74. **Results of her investigations revealed the following findings: Hb=7 g/dl, Reticulocyes 15%, bilirubin= 5 mg/dl. The most likely diagnosis is:**
    a- Thalasemia major.
    b- Thalasemia minor.
    c- G6PD.
    d- Sickell cell anemia.(SCA)
    e- Lead toxicity.

75. **The most important long term management of Salwa should include:**
    a- Iron tablets.
    b- Folic acid .
    c- Vitamin-B1.
    d- Paracetamol.

76. **The least expected chronic complications that could affect Salwa is:**
    a- Chronic skin ulcer.
    b- Systemic hypertension.
    c- Retinal detachment.
    d- Bone infarction.
    e- Gallstones.

77. **To minimize re-occurance of Salwa's problem,she should receive all the following therapies <u>except:</u>**
    a- Hydroxyurea.
    b- Folic acid.
    c- Penicillin-V.
    d- Paracetamol.
    e- H.influenza vaccine.

78. **The phenomenon that Salwa suffered from when she came to ER is known as:**
    a- Sequestration crisis.
    b- Hemolytic crisis.
    c- Aplastic crisis.
    d- Vaso-oclusive crisis.

79. **Husam is 7 years old Saudi male brought by his father to your clinic last week complaining of recurrent**

sore throat(6 attacks during the last three months), fever, generalized body ache for three days. There was no other compliant. Physical exam revealed the following findings: ,Temp=38.3C, moderate congested throat, non-tender bilateral anterior cervical lymph nodes, Chest, Ear, Abdomen were normal. The next step of action would be:

a- PrescribeAntibiotics, antipyretic, and follow up if no improvement within one week.
b- Asking for CBC.
c- Reassuring the father and prescribe antipyretic PRN.
d- Asking for throat swab and send it for culture & sensitivity .

80. Two weeks later Husam presented with the same complaints , Physical exam revealed the same findings except temperature decreased to 37.9C. Your action would be :

a- Prescribing another antibiotics ,antipyretic, and follow up if no improvement within one week.
b- Asking for CBC.
c- Reassure the father and prescribe antipyretic PRN.
d- Ask for Throat swab and send it for culture .
e- All above.

81. Results of investigations revealed the following results: Throat swab was negative, Hb=10 g/dl, WBC=40.000 /mm ^{3} , Platelets=100.000 /mm ^{3}. The most likely diagnosis is:

a- Infectious mononucleosis.
b- Hodkin's lymphoma.
c- Anemia.
d- Acute lymphoblastic leukemia.

82. To confirm the definite diagnosis you should ask for:

a- Blood film.
b- Bone marrow examination.
c- EBV serology.
d- Hemoglobin electrophoresis.
e- Lymph nodes biopsy.

83. Essential management of Husam consists of :

a- Antiviral agents.
b- Radiotherapy.
c- Chemotherapy.
d- Blood transfusion.

84. Husam' father asked about the cure rate of his son , your response would be:

a- I do not know.
b- Husam is most likely to cure from this disease..
c- No body can give him the exact cure rate.
d- Tell him that the prognosis could not be expected now , and he would be told later on.

85. Youe senior registrar asked about the differences between acute lymphoblastic and acute meyloid leukemia , you could tell him all the following information except:

a- Both could be present with fever, fatigue and loss weight.
b- Both could have different cure rate .
c- Both are treated by chemotherapy.
d- Both affect all age groups equaly .

86. Which one of the following patients has poor prognosis in acute lymphoblastic leukemia?

a- Patient with Hb =12 g/dl.
b- Patient with Platelet=250.000 /mm ^{3}.
c- Patient of 23 years old.
d- Patient with high grade fever at presentation.

87. Waheed is a 7 years old Saudi male child , he was well till three days ago when he developed acute upper respiratory tract infection(URTI). Today he came with his father to your clinic complaining of abdominal pain , tea discoloration of urine, and buttocks skin rash , there was no fever or any other complaint. Physical examination revealed the following findings: He looked well, afebrile, , no pallor or jaundice, abdomen was generally tender, no rigidity, there was skin rash over both buttocks ,no organomegally or lymphoadenopathy. The most likely diagnosis is:

a- VonWellbrand disease.
b- Idiopathic thrombocytopenia purpura.
c- Henoch-Schonlein purpura.(HSP)
d- Glomerulonephritis.
e- Viral infection.

88. Basic management of the this child would be:

a- Platelets transfusion.
b- Oral steroid.

c- Infusion of intravenous immunoglobulin.
d- Blood transfusion.
e- Asking for CBC, reassurance and close observation.

89. Aisha is a 33 years old Saudi female who delivered a baby last week and came to you today for advice regarding care of her baby, she asked you about caring for umbilical cord, Which of the following statements is true concerning this issue:
a- She should clean umblical cord daily using water and soap.
b- She can separate it at the end of the first week if not separated spontaneously.
c- It is common entry for bacterial infection in premature babies.
d- It should be separated by the end of third week of delivery in all normal neonates.

90. One of the following tests should be carried out for Aisha's baby:
a- Sickling test.
b- Hemoglobin electrophoresis.
c- Thyroid function test(TSH, T3,T4).
d- Hepatitis-B serology.
e- Tubeculin test.

91. While examination, you noticed that Aisha's baby had yellowish sclera of mild severity , you thought that this jaundice was physiological type. Which one of the following features did not suggest physiological jaundice?
a- It does not appear during the first twenty–four hours of delivery.
b- Total bilirubin does not exceed 15 mg/dl.
c- Direct bilirubin does not exceed 6 mg/dl.
d- It should disappear by the end of the second week of birth in premature infants.
e- Total bilirubin should not exceed by more than 5 mg/dl per day.

92. Abdulkareem is a 5 years old child who was brought to Emergency department by his father two days ago complaining of yellowish discoloration of his eyes and dark urination for the last twenty – four hours. There was no fever, no nausea or vomiting , or abdominal pain.The least important question that should be asked to this father would be:
a- Past history of similar attacks.
b- Intake of vitamin-C.
c- Using of antibiotics such as cotrimexazole.
d- Eating beans in the past three days.
e- Past history of blood transfusion.

93. To confirm diagnosis in this patient, you should ask for:
a- Hemoglobin electrophoresis.
b- Sickling test.
c- Bone marrow examination.
d- Liver function test.
e- G6PD level after two weeks.

94. Cornerstone management of the above mentioned patient is:
a- Prescribing Folic acid.
b- Bone marrow transplantation.
c- Avoiding fava beans and oxidative drugs.
d- Prescribing hyroxyurea.
e- Avoiding exercise.

95. Feras is 6 months Saudi male child brought by his mother to ER complaining of jaundice for two months, there was no fever, no nausea or vomiting.Physical examination revealed he following findings: Pallor, Juandice, splenomegally. You asked for CBC which indicated the following results:Hb=6g/dl,Ht=17%,MCV=65fl, Platelets=250.000/mm ^{3} .The most likely diagnosis is:
a- Sickel cell anemia.
b- Iron deficiency anemia.
c- Thalasemia Minor.
d- Sidroblastic anemia.
e- Thalasemia Major.

96. To confirm diagnosis, the first test that you should ask for would be:
a- Blood film.
b- Hemoglobin electrophoresis.
c- Serum ferritin level.
d- Bone marrow examination.

97. Long term management of Feras should include all the following except:
a- Desferrioxamine..
b- Blood transfusion.
c- Oral iron .
d- Oral folic acid.

98. **One of the following complications is unlikely to occur for this child:**
    a- Liver cirrhosis.
    b- Hepatitis-B.
    c- Diabetes Mellitus.
    d- Nephrotic syndrome.
    e- Cardiomegaly .

99. **The most common morbidity seen among children is:**
    a- Otitis media.
    b- URTI.
    c- UTI.
    d- Gastrointritis .
    e- Dermatitis.

100. **One of the following is not a clinical manifestation or complication of Down Syndrome**
    a- Hyperthyrodism.
    b- Atlanto-axial instability.
    c- Hearing impairment.
    d- Leukemia.
    e- Seizure.

101. **Fragile X Syndrome (FXS) is manifested by all of the following features except:**
    a- IQ is less than 70%.
    b- Large ears.
    c- Wide face.
    d- Large testes .
    e- Seizure.

102. **One of the following is not true about Cystic Fibrosis:**
    a- It is autosomal recessive disorder.
    b- Lung is the most affected organ in the body.
    c- Recurrent chest infection is rare.
    d- Sweat test shows elevated sodium and chloride.
    e- Mean survival age is about thirty years.

103. **One of the following is not a feature of Thalasemia Minor:**
    a- Low MCV.
    b- Low serum ferritin.
    c- Hypo-chromicia.
    d- Pallor.

104. **One of the following is unlikely to be seen in a child suffering from Prader Willi Syndrome:**
    a- Hypotonia.
    b- Failure to thrive.
    c- Obesity.
    d- Big hands and feet.
    e- Hypogonadism.

105. **Tall stature , myopia, high arched palate, mitral valve prolapse ,long digits are clinical features of :**
    a- Noonan syndrome.
    b- Klinfelter Syndrome.
    c- Marfan syndrome.
    d- Turner Syndrome.
    e- Parader Willi syndrome.

106. **All the following are autosomal dominant disorders except:**
    a- Tuberous Sclerosis.
    b- Noona's Syndrome.
    c- Phenylketonuria.
    d- Neurofibromatosis.
    e- Huntington syndrome.

107. **All the following are X-linked Disorders except**
    a- G6PD.
    b- Hemophilia.
    c- Tay-Sachs Syndrome.
    d- Duchen Muscular Dystrophy.
    e- C and D.

108. **Massive splenomegaly is seen in:**
    a- Hemophilia.
    b- G6PD.
    c- Gaucher's disease.
    d- Tay-Sachs Syndrome.

109. **Short stature, webbed neck, coarction of aorta are typical features of:**
    a- Marfan's Syndrome.
    b- Klinfelter syndrome.
    c- Turner Syndrome.
    d- Parader Willi Syndrome.
    e- William Syndrome.

110. **Tall and long limbs, small testes, gynecomastia and infertility are manifestations of :**
    a- Marfan syndrome.
    b- Klinfelter syndrome.
    c- Turner syndrome.
    d- Parader Wili syndrome.
    e- William Syndrome.

111. **One of the following cancers is unknown to be familial:**
    a- Colorectal Carcinoma.
    b- Breast cancer.
    c- Ovarian cancer.
    d- Liver cancer.

112. One of the following test results is not true regarding screening for Down Syndrome in the second trimester
- a- Increase Alpha Fetoprotein.
- b- Decrease unconjugated oestriol.
- c- Increase Inhibin-A.
- d- Increase Free B-hCG

113. A women of 45 years old came to your clinic in her first trimester .The probability to have a baby with Down Syndrome is:
- a- 1 :1000.
- b- 1:275.
- c- 1:20.
- d- 1:400.
- e- 1:10

114. The incidence of congenital abnormality at birth is about:
- a- 1%.
- b- 2%.
- c- 3%.
- d- 4%.
- e- 5%.

115. Prenatal screening could be carried out to detect the following conditions except:
- a- Down Syndrome.
- b- Thalasemia.
- c- Sickle cell anemia.
- d- Neural Tubal defects.
- e- Phenylketonuria

116. Dark-black urine is a cardinal feature of which one of the following conditions:
- a- Porphyria.
- b- Alkaptanuria.
- c- Phenylketonuria.
- d- Gaucher disease .

117. Guthrie test is used as screening test for:
- a- Porphyria.
- b- Alkaptanuria.
- c- Phenylketonuria.
- d- Hypothyrodism.

118. Typical manifestations of acute porphyria include all the following except:
- a- Severe abdominal pain.
- b- Red urine.
- c- Low serum sodium.
- d- Hypoglycemia.

119. Sulphonamide should not be prescribed for child suffering from:
- a- Porphyria.
- b- G6PD.
- c- Phenylketonuria.
- d- Thalasemia.
- e- a&b

120. Hyercalcemia is a main feature of:
- a- Gucher's disease .
- b- William Syndrome.
- c- Noonan Syndrome.
- d- Porphyria.
- e- Tay-Sachs Syndrome.

121. One of the following is not known manifestations of Hemochromatosis
- a- Impotence.
- b- Polyuria.
- c- High liver enzymes.
- d- Low serum ferritin.
- e- Joints pain.

122. Most of children with Duchen Muscular Dystrophy(DMD) die as a result of:
- a- Cardiovascular problems.
- b- Respiratory problems.
- c- Gastrointestinal problems.
- d- Renal problems.
- e- Muscular problems.

123. All the following are known manifestations of Neurofibromatosis except:
- a- Café- au lait spots.
- b- Freckling in the axillary and inguinal regions.
- c- Optic nerve glioma.
- d- Hypotension.

124. Which of the following TWO disorders have similar features:
- a- Marfan and Klinfelter syndromes.
- b- Turner and Noonan syndromes.
- c- Pardar Willi and William Syndrome.
- d- Gaucher and Tay-Sachs Syndromes.
- e- Phenylketonuria and Porphyria.

125. If a couple knows that they are carriers for sickle cell anemia .The probability to have carrier child is:
- a- 25%.
- b- 50%.
- c- 12.5%.
- d- 100%.

126. Growth retardation, hepatomegally, renomegally,,hypoglycemia and hyperlipidemia are typical manifestations of which of the following conditions:
- a- Tay-Sachs syndrome.
- b- Gaucher syndrome.
- c- Glycogen storage disease.
- d- Porphyria.
- e- Phenylketonuria.

127.**One of the following statement is not true about Urinary Tract Infections(UTI) in children:**

a) Boys are affected than girls.
b) The most common organism is E. coli.
c) Back to front wiping is not a risk factor for UTI.
d) One day course of antibiotics is not recommended for management UTI.
e) Oral antibiotics as effective as parental in children tolerate orally.

128.**Urine culture is indicated in the following situations BUT:**

a) Child with cloudy urine color .
b) Child with positive urine dipstick for nitrite .
c) Child with dark yellowish urine color.
d) Child with recurrent UTI.

129.All the following antibiotics could be prescribed empirically for children with suspected UTI BUT:

a) Amoxycillin.
b) Ampicillin.
c) Cotrimexazole.
d) Cephalexin.
e) Cefixime.

130.All the following statements about ingestion of foreign bodies (FB)are CORRECT Except :

a) Serious morbidity is seen in about 15% of children ingested FB.
b) About 50% of ingested FB is asymptomatic.
c) Bowel obstruction, perforation are known complications of FB ingestion.
d) Common site for obstruction of FB will be at cricipharngeal area, lower esophageal sphincter and pylorus.
e) If FB passed esophagus it will pass without complication in most of cases.

131.All the following statements about" Evaluation of FB ingestion in children" are true Except:

a) Plain X-rays will identify about two third of FB.
b) Almost all FB will pass without need to medical or surgical intervention.
c) About half of children ingest FB need endoscopy.
d) Observation is recommended for asymptomatic children who ingested small blunt FB and found that FB is below diaphragm .
e) Emergency endoscopy is recommended for children who ingested button batteries or sharp objects in the esophagus.

132.All the following statements about management of FB ingestion in children are correct But:

a) Asymptomatic sharp objects that passed duodenum should be checked daily by X-rays, daily stool check for pass and should be removed if did not move from its site for three consecutive days.
b) Symptomatic sharp objects that did not pass duodenum should be removed by endoscope.
c) Large FB which pass duodenum should be checked weekly by plain X-rays and by daily stool check.
d) Small blunt FB that did not pass pylorus should be managed by emergency endoscopy.

133.Esophageal FB could cause all the following complication But:

a) Perforation.
b) Stricture.
c) Tracheosophageal fistula.
d) Aspiration pneumonia.
e) Anaphylaxis shock.

134.One of the following is not true regarding Button Batteries ingestion in children:

a) They have direct erosive effect during the first four hours of ingestion.
b) They should be removed by endoscopy if they remain in the stomach for more than 48 hours.
c) If they pass the duodenum , they almost will pass outside the body within 72 hours.
d) Daily plain X-rays is recommended to follow the progress of these FB.

135.Which one of the following statements about Apparent Life Threatening Events(ALTE) is false:

a) Most of cases occur between 1-5 years old.
b) The peak incidence occurs in the first two months of age.
c) Most of events occur in infants of less than ten weeks.
d) Apnea, skin color changes, muscle tone changes are common manifestations of ALTE.
e) About 50% of causes are idiopathic .

136.Late complications of ALTE include all the following except:

a) Cognitive deficit.
b) Gross motor deficits.
c) Fine Motor deficits.
d) All above.
e) None above.

137.Minimal investigation that should be carried out for infant of ALTE include all the following except:

a) CBC.
b) Urine analysis.
c) CSF examination.
d) Blood culture.
e) ABG.

138. Ali is 3 years old male who diagnosed as Klinefelter Syndrome. His mother ask about this syndrome, you can tell her all the following information BUT:

a) Almost all the affected individuals are infertile.
b) Most of cases are diagnosed in the early childhood.
c) The karyo-type is XXY.
d) Its incidence is about 1 in every 1000 male birth infants.
e) It causes about 3% of male infertility.

139.You ask for hormonal assay for Ali. All the following are expected results BUT:

a) High LH.
b) High FSH.
c) High testosterone.
d) Normal Prolactin.

140.Expected clinical features that you can find in Klinefelter syndrome include all the following BUT:

a) Gynecomastia.
b) Small testes .
c) Short Stature.
d) Small penis.
e) Attention deficit.

141.Ali is at high risk of development all the following complications BUT:

a) Liver cirrhosis.
b) Osteoporosis.
c) Diabetes.
d) Deep venous thrombosis.(DVT)
e) Breast cancer.

142.One of the following children is not at high risk of reading difficulties:

a) Turner Syndrome (TS).
b) Down Syndrome(DS).
c) Klinefelter Syndrome(KS).
d) Meningitis.
e) Lead Poisoning.

143.Risk factors for reading difficulties include all the following BUT:

a) Family history of language difficulties.
b) Prematurity.
c) Female gender.
d) Low birth weight infants.

144.The prevalence of reading difficulties is about:

a) 10%.
b) 15%.
c) 20%.
d) 25%.
e) 5%.

145.One of the following is not a common feature of Henoch-Schonlein Purpura(HSP):

a) Abdominal pain.
b) Hematuria.
c) Scrotal swelling.
d) Elevated liver enzymes.
e) Hemat-emesis

146.Suhail was diagnosed as HSP, which of the following investigation will not be asked for him:

a) CBC.
b) KFT.
c) Urine analysis.
d) ESR.
e) Stool Analysis.

147.The most common morbidity seen among patients with Juvenile Rheumatoid arthritis (JRA)is:

a) Pericarditis.
b) Uveitis.
c) Colitis.
d) Nephritis.
e) Urethritis.

148.Husam is 20 months old Saudi boy who was brought by his other to your clinic for vaccination . You found that his weight and height were less than fifth percentile , anterior fontanel did not close yet, you consider the ricket as your provisional diagnosis . Which one of the following is the least important question to be asked to his other in this regard?

a) Family history of rickets.
b) Polyuria.
c) Seizures.
d) Exposure to sun light.
e) Current dietary intake.

149.Which one of the following features does not suggest rickets diagnosis in this child ?

a) Frontal bossing of skull.
b) Genu Valgum.
c) Flaring wrist.
d) Kyphosis.
e) Early closure of anterior fontanel.

150.You asked for investigations, which one of the following findings is not expected?

a) Low calcium .
b) Low phosphorus .
c) Low alkaline phosphatase.
d) High parathyroid hormone.
e) Low urinary calcium.

151.You started Vitamin-D for this child, the earliest biochemical marker that will appear is:

a) Rise serum phosphorus .
b) Rise serum Calcium.
c) Rise Alkaline phosphatase.
d) Rise urinary calcium.
e) Rise Urinary phosphate.

Answers

1-Answer: A
As a rule the infants gain 750 grams monthly during the first three months, 500grams monthly during the second three months and 250 grams monthly during the next six months. Infants doubled their birth weight by six months and tripled it by the end of the first year .Regarding height, the birth length will be about 50 cm and the length at the end of the first year will be 75 cm (increased by 50% of the birth length), in the second year it increased by 12.5cm , in the third and fourth year it increased by 5-6 cm annually .

2-Answer: A.
As mentioned in the previous question the weight will tripled by the end of the first year while length will increased by 50% (25 cm) and head circumference will increased by one centimeter monthly in the first year .

3-Answer: B
See answer Q No(1)

4-Answer: D.
In spite of variation from child to another, the average age at which the anterior fontanel closes between 9-18 months compared to the posterior fontanel that closes by the end of the second month of age in most of infants.

5-Answer: C.
In most of infants, they can sit without support by the end of the six month while crawling will take place between 8-9 months,walk around the furniture at 10 months, walking unsteady at 12 months and walking alone at 15 months of age.

6-Answer: D.
Child abuse is not uncommon in our community.However, it is rarely reported for many reasons . Those children with poor family income, difficult economic status, children live with family members using illicit drugs , and children with physical or mental disability are at high risk for abuse .Children who suffer from abuse attend health care setting after long time of abuse and their care providers give stories that were not relevant to the physical findings .

7-Answer: A.
Infantile colic is benign in nature and affects at least one out of five infants during the second and third month of age . Its main manifestation is crying which occurs daily at evening time and takes about three hours.During attacks, the abdomen looks extended and legs are drawing up . The underlying cause is not known . There is no definite treatment, mother should be reassured about the nature of the problem after ruling out the problems associated with crying such as otitis media, infections and intussusceptions .

8-Answer: E.
Huda presented with typical manifestation of infantile colic as mentioned in the previous question (Q No:7).

9-Answer: E.
When the infants present with typical features of infantile colic , doctors should carry out relevant clinical examination in order to rule out other causes of crying such as infections . In this infant with one week of abdominal pain without associated signs of infections mother could reassured regarding her daughter condition.

10-Answer: E.
No drugs were approved to manage infantile colic effectively .

11-Answer: C.
For those infants whose mothers are known to be negative HbsAg , they should be given hepatitis B vaccine at birth , 2 months and six months. For those infants whose mother hepatitis-B status is unknown they should receive hepatitis-B vaccine after birth immediately , ask for mother HbsAg and if it is positive you should give her infant hepatitis-Bimmunoglobulin . Those infants whose mothers are known to be positive for HbsAg, they should receive hepatitis-vaccine and hepatitis-B immunoglobulin within the first 24 hours of delivery.

12-Answer: E.
Colostrums is yellowish alkaline fluid that come out from the breast during the first three days of delivery . It is rich in protein (globulins) , fat ,carbohydrate and vitamins. Each liter of clostrum contain 22 grams of protein, 30 grams of fats and 45 grams of lactose

13-Answer: A.
Although both formula have equivalent calories as those present in cow milk(200 calories/ 30 ml of milk), breast milk has high carbohydrate than cows milk .Sources of the calories are different(20% of calories in cows milk come from protein while protein constitutes less than 7% as source of calories in breast milk), breast milk rich in immunoglobulin ,albumin and iron , breast milk

has 60% of Whey protein and 40% as Casein while most of protein in cow milk is Casein .

14-Answer: C.
Breast feeding could minimize the incidence of occurrence of some gynecological tumors such as breast cancer, ovarian cancer, and uterine cancer.

15-Answer: D.
It was found that practicing breast feeding has advantages for mother and infants.The benefits for infants include : minimizing infantile colic, skin allergy, asthma, constipation, infections, obesity, and DM type 1 .There is no evidence that breast feeding protect against hypertension.

16-Answer: A.
The most common cause of short stature is familial followed by constitutional cause. Parents of the first type are usually short . In the second type there is family history of delayed in height during childhood . Other causes of short stature include growth hormone deficiency, hypothyroidism , excessive use of steroids, chronic disorders and psychological deprivation .Short stature could be caused by intrauterine growth restriction and in this situation the child' lengthat birth is less than the fifth centile.

17-Answer: D
Children with familial and constitutional short stature are usually grow slowly regarding their height which is parallel to but less than 5th centile. Height of children with family history of short statute could be predicted if we know the parents height.In children with constitutional short statute , they show delayed bone age in comparison to chronical age while in familial type the children age is matching bone age if we ask for carpal bone X-rays and compare it to standards.

18-Answer: A.
Bone age is used to differentiate between familial and constitutional short stature as mentioned in the previous question.Constitutional short stature is not the only cause for delayed bone age.
Other causes include low thyroid hormones and lack of growth hormone.

19-Answer: B.
Mastitis and breast abscess which occur in lactating mother is usually caused by S. aureus in most of cases .

20-Answer: B.
Managing this lady should include : Paracetamol, hot compress packs, and antibiotics which are safe during lactation(Augmentin , Dicloxacillin, Cephalexin, or Clindamycin). Breast feeding should continue from both breasts ,milk could be pumped if appropriate . Following up after 48-72 hours is recommended .

21-Answer: D.
Satisfaction abut breast feeding by the infants could be indicated by different ways ; good sleeping after breast feeding(2-4 hours) , gaining the expected weight, passing 6-8 motions per day . Cessation of feeding while the breasts are still full of milk may not indicate adequate breast feeding as the baby may suffer from health problem such as infections that interferes with sucking .

22-Answer: D.
Sudden infant death syndrome is the leading cause of death during the first 12 month oflife. Risk factors for this syndrome include : smoking at homes, sleeping on stomach, sleeping with another person in the same bed could be another risk factor. To minimize those risk, it is advised that infant should sleep in his back or side, should not be alone in his room and smoking should prohibited in the house,and to use pacifier.

23-Answer: D.
This child who had URTI three days ago presented with feature of acute upper respiratory tract obstruction which manifested with stridor at rest , tachypnean. The most likely diagnosis is croup as this problem preceded by URI followed by trachio-bronchial inflammation (croup) This diagnosis is also supported by patient age(6 month- 6 years) , non-toxicity (sign of epiglotitis),and other signs of lower respiratory infections(fever, rales and decrease air entry). Bronchial asthma and acute bronchitis are less likely as their main features are not present.

24-Answer: B.
Even we use inhalation moist air very frequently in our daily practice, it was not proved to be effective in management of croup . In this child the best option of management is Nebulized steroid such as budesonide which found to reduce the severity and duration of croup. Neublized adrenaline could be used in severe cases but its effect was found to be transient . There is no role for using antibiotics or beta agonist in management of croup .

25-Answer: A.
Croup is viral infection that is caused in most of cases by Para influenza virus .It affects children of 6 months to six years old and its peaks is around 2-3 years. It is self-limited condition

which resolves within few days without serious complications.

26-Answer: C.
Otitis media could be defined as ear pain which associated with fever, irritability , bulging of the eardrum with effusion . It affects at least two-third of children before the end of the first year of life . Streptococcal pneumoniae is still the leading bacterial cause (40-50%), followed by . H. influenza (20-30%) and Moraxella Catarrhalis(20-30%) . The management include painkiller such as Paracetamol and antibiotics (amoxicillin). If there is any allergy for this antibiotic the other options include erythromycin or Cotrimexazole . Using of ear drops or anti-histaminics are not approved to be effective . Recurrent OM could be defined if there are three attacks or more during the past six months or four attacks during the past 12 months. Management of recurrent otitis media include use of antibiotics prophylaxis for six months in order to prevent recurrence but not longer than this duration to minimize bacterial resistance .

27-Answer: C.
Acute otitis media could be complicated with intracranial complications such as meningitis, encephalitis, brain abscess , sub-dural abscess and lateral sinus thrombosis . Extracranial complications include: deafness, tympano-sclerosis, mastoditis, facial palsy, cholesteatoma, labyrinthitis and tympanic membrane perforation.

28-Answer: C.
Management of recurrent otitis media (ROM)include many interventions such as antibiotics , myringotomy or ventilation tube (grommet) which have similar outcome.Antibiotics could be given for not more than six month as half strength . Drugs such as topical ear drops and decongestants have no role in managing ROM.

29-Answer: C
This child has typical features of common cold which is caused by viral agents . The most common causative agent of common cold is Rhinovirus (35%) followed by other viruses such as influenza and Para influenza viruses .

30-Answer: C
General management of patients with common cold include reliving fever by using Paracetamol, reducing running nose by frequent nasal cleaning and using normal saline nasal drop . Anti-histaminc nasal drop could be used to relive running nose and congestion. There is no role for Vitamin-C in curing or prevention common cold.

31-Answer: D.
It was found that the most effective measure to prevent common cold from affecting the other members of household is frequent washing hands.

32-Answer: E.
These features go with URTI as there were cough, fever and sore throat with mild congestion. Croup present with barking cough and stridor with or without low grade fever. Rhinitis is manifested with congested and running nose .Child suffers from acute bronchitis usually has cough, low grade fever and normal throat and nose.

33-Answer: D
This child is most likely to have viral pharyngitis which needs to reassure his parents and to relive temperature and sore throat by prescribing Paracetamol. There is no need to refer this child or to ask for throat swab as most of sore throat with this clinical picture is viral in origin.

34-Answer: B.
This child is most likely to suffer from bacterial pharyngitis which supported by presence of five (Centor) criteria that used to differentiate bacterial from viral sore throat(fever>38C, no cough, tender anterior cervical lymph nodes, congested throat in addition to child age) . The likely hood ratio to have bacterial pharyngitis is 4.5 . Infectious Mononucleosis is unlikely as this problem occurs during early adolescents more than children less than ten years as this child. There is no diagnosis known as non-specific pharyngitis.

35-Answer: C
In this child with clinical features supporting the diagnosis of bacterial pharyngitis we should prescribe anti-pyretic till pain and fever subside and antibiotics for 7-10 days . The preferred antibiotics is still Penicillin-V orally . In the case of the patient present with 1-3 clinical features mentioned in the previous question , giving anti-pyretic and asking for throat swab for culture and sensitivity is practical option. There is no need to refer this patient to pediatrician as the management will not differ and care will not be cost-effective .

36-Answer: D.
Early treatment of bacterial pharyngitis has many advantages which include : reliving symptoms, decreasing the duration of symptoms, minimizing

the virulence and severity of pharyngitis in addition to decreasing the incidence of rheumatic fever. However, there is nor role for using antibiotics for preventing post-streptococcal glomerulonephritis.

37-Answer: B.
The immediate management of this child which considered as a priority is reducing the high temperature which could lead to febrile convulsion and then ask for Chest X-rays to confirm the diagnosis of pneumonia which should be followed by taking blood sample for CBC, culture and sensitivity , followed by prescribing antibiotics and referring to pediatrician immediately for possible admission .

38-Answer : E.
In 50% of patients with pneumonia there is no identified underlying microbe . In infants and young children(< 5 years) RSV is common followed by Streptococcus. Among newborn, group B-streptococcus and gram negative are common causes. In children above five years the most common causative agents are viral, Mycoplasma pneumoniae followed by Streptococcal pneumoniae.

39-Answer: E.
Risk factors for occult bacteremia include : WBC >15000 or < 5000 mm ^{3} , high grade fever>39 C and toxic looking . Low birth weight is not included as a risk factor for this condition.

40-Answer: A.
Occult bacteremia affect about 1.6-1.8% of children with fever. The most common diagnosis associated wit bacteremia are: otitis media and pneumonia .The most common organisms are: S. Pneumoniae,H.influenzae which are responsible for 65% and 25% of occult bacteremia respectively.Risk factors are mentioned in the previous question .Due to administration of H. Influnzae vaccine during the early childhood, incidence of occult bactemia was reduced.

41-Answer: D.
The child was looked well even he had many loose motions during the last three days . As there wa no signs of dehydration or toxicity, this child could be managed by giving him ORS as 50-100 ml after each loose motion .We should encouge his mother to give other fluid such as fresh juices and to take his ordinary meals as there wa no vomiting . There is no role fo antibiotics as most of cases of acute gastrointritis are caused by viral agents . This child was stable ,well hydrated without any signs of toxicity, so there is no indication for admission to hospital.

42-Answer: C.
Most of the cases of GE are caused by viral agents(70%) : Rotavirus followed by Norwalk virus ,Astrovirus and Echovirus. Bacteria cause about 15-20% of GE and the most common causes are campylobacter jejuni,E.coli , salmonella and shigella .

43-Answer: C.
GE that caused by Rotavirus are severe and could lead to severe dehydration and admission. As this virus responsible for the majority ogf GE admmited among age group 6-24 months ,this vaccine should be given before eight month of age .

44-Answer: A
The ORS formula recommended by WHO contains: Sodium(90mEq/L, Potasium(20MEq/L, Chloride(80mEq/L , HCO3 (30mEq /L) and two grams Glucose .

45-Answer: A.
Most of bacterial GE are watery in nature, but some of them have bloody diarrhea. The most common cause of bacterial GE is C. Jejuni . Most of such cases not need antibiotics and recoverd sponatounsly . If there is any manifestation of bacterial GE we should ask for relevant investigations such as stool culture.

46-Answer: D.
All invasive organism that cause mucosal injury might cause bloody diarrhea such as Salmonella, Shigella, Campylobacter and E.Coli . Howver, Yersinia can cause watery dirrhea and cramp abdominal pain without bloody stool.

47-Answer: D.
Diarrhea could be caused by using many antibiotics such as Penicillin, Amipicilin , erythromycin and clindamycin . The majority of cases are caused by Ampicillin and considered as selflimited which improve with cessation of antibiotics.Pseudomembranous colitis could develop in some cases as a result of overgrowth of Clostridium difficile . Most of cases of antibiotics induced diarrhea will not be complicated by such condition . If this complication occurs it may lead to poor outcomes such as death(20-30%).

48-Answer: A
This child is most likely to have recurrent abdominasl pain which occur in about 10% of children of early adolesnt age . As this child had many previous attacks withou investigation we should do basic investigations such as urine,

stool analysis abdominal X-rays and complete blood count in order to rule out the other organic causes such as infections. Reassuring without ruling out other possible cause is premature action and referring to pediatrician also. We should not prescribe any drugs till we know the underlying cause.

49-Answer: E.
This child is unlikely to have IBS or IBD as these two diseases affect adults more than children in addition that there was no other systemic or local manifestion such as diarrhea. consitption or bloody stool.Giardiasis is diagnosed based on stool analysis while Lactose intolerance is associated with diarrhea .

50-Answer: C
Management of RAP consists of reassurance, psychological support and pain relive if occur . There is no need for further investigations, referral or prescribing of any sedative.

51-Answer: C.
This condition (RAP) has the highest incidence between 10-12 years old. It affects about 10% of children of both sexs equally . School performance of children suffering from RAP is lower than normal children which could be explained by frequent absentism from school .Using sedative in management of this condition is not recommended but antispasmodics could be used .

52-Answer: E.
Abdominal pain is very common during childhood. However, the main underlying cause differs according to the child age. During infancy, the the infantile colic is the most common cause followed by gastroenteritis. In preschool age the GE is the most common cause followed by urinary tract infection(UTI). In school age , GE , UTI ,and RAP are the most common causes while in adolesnce , GE and UTI followed by appendicitis are the most common causes. Generaaly the most common medical cause of abdominal pain during childhood is GE while appendicitis is the most common surgical cause.

53-Answer: C.
Patients who present with hip pain and limping in their 10-15 years old are most likely to have slipped capital femoral epiphysis . There is displacement of the epiphysis of the femoral head posterio-inferiorly . There is restriction of abduction and internal rotation of the hip. Other diagnosises are unlikely as Perthes disease which presents as insidious pain and occurs between 4-10 years old. Septic arthritis is associated with high grade fever . Toxic transiet synovitis occurs in early childhod (2-12 years old) and not assocaited with fever or rest pain , but there is limitation of external rotation at hip. In Osgood Schlater disease , the pain is at tibial tuberosity . It results from overuse syndrome that occurs during puberty due to partial avulsion fracture through the ossification center of the tibial tuberosity.

54-Answer: D.
This patient with such clinical features is most likely to have Slipped capital femoral epiphysis which should be confirmed by asking for X-rays .

55-Answer: C.
The option of management in this child is surgical with pin fixation in situ. Other option could be used for other diagnosies but not for this condition.

56-Answer: B
Perthes disease affects those children younger than ten years(4-10 years). It occurs due to vascular necrosis of the femoral head. Children presented with hip pain and limping of insidous nature. There is no associated fever. Ranges of movments almost restricted. Boys are affected more than girls(5:1) .

57-Answer: D.
These features suggest Osgood-Schlater disease as the patient is adolesent, presented with knee pain which aggraviated by running .

58-Answer: C
To confirm the above mentioned diagnosis, you can ask for knee X-rays . Other tests such as arthroscopy and ultrasound are not recommended as initial diagnostic tests in such patients.

59-Answer: C.
The appropriate options of management of this patient include restriction physical activity and knee immobilization splint. There is no role for injection local steriod and should be avoided in such condition.

60-Answer: C.
This condition is benign and cures with time in most of patinets without any complication but it takes few months to heal completely.

61-Answer: E.
In the early stage of adolescence , individuals who come for minor problems such as URTI , we

should not miss this chance to evaluate them concerning many issues such as performance at school , social issue such as smoking and sex , introducing preventive measures such as measuring blood pressure and weight in addition to review record to ensure that they received all vaccines. Asking about addiction is not appropriate in this age. However, smelling smoke in such patients could guide you to ask about some habits such as drinking and use illicit drugs.

62-Answer: B.
In this young patient it is expected that his pubic hair started by 10 years. However, it could be late till 14 years. If there is no pubic hair at 15 years old it is considered to have delayed puberty which needs investigations. In this patient we should do initial comprehensive evaluation of growth and development.

63-Answer: B.
The most common morbidity affecting all age groups in Saudi Arabia including adolescents is acute respiratory infection which represents about one quarter of visits to primary care settings. Acne is another common problem affecting about 75% of young individuals.

64-Answer: D.
In Saudi Arabia, about 4000-4500 die annually due to road traffic accidents. (RTAs). Most of these victims (two-third) are between 15-40 years old.

65-Answer: D.
Although, the organic cause of night bed wetting in children is uncommon, it essential to rule out those causes such as UTI, DM and Diabetes insipidus.

66-Answer: B.
The most important test that we should ask for initially is complete urine analysis. Results of this test will guide us regarding the next step and action plan for this child. Urine analysis will help us to diagnose UTI, DM. Blood glucose could be asked if we suspect DM. KUB and ultrasound could be asked later on if we suspect kidney or bladder patholgy such as chronic renal failure or chroinc renal infection.

67-Answer: D.
The best option of management of children suffering from nocturnal enuresis includes behavioral therapy, and desmopressin.

68-Answer: D.
Allergic rhinitis is an inflammation of the nasal mucosa that is triggered by many irritating agents such as dust, perfumes, and smoke. Patients with such condition present with running nose, itchy nose and sneezing .Clinical exam revealed congested and boggy nasal mucosa and nasal obstruction. Complications include otitis media, sinsitis, nasal polyps and epistaxis. Management include: avoidance trigger factors, systemic anti-histaminic, topical decongestant, intra-nasal steroids and immunotherapy. The treatment with highest efficacy is intranasal steroids .About 10% of patients with allergic rhinitis will develop bronchial asthma.

69-Answer: D
The most serious and common known side effects of using nasal decongestant for long time is developing of" rebound nasal congestion" which is known as rhinitis medicomentosa. As a result, it should not be used for longer than five days.

70-Answer: C.
This infant is most likely to have irritant contact dermatitis as a result of prolonged exposure to feces and urine. Skin folds are usually not affected. Fungal infections show satellite skin lesions with affected skin fold.

71-Answer: D
Management of this infant include frequent diaper change, cleaning the affected area using warm water and soap, frequent exposure of the area to air in addition to use topical hydrocortisone ointment and zinc oxide . There is no indication for antibiotics or anti-fungal unless there is bacterial or fungal infections.

72-Answer: A.

73-Answer: E.
This girl most likely to have pain crisis which affects patient with sickle cell anemia when they come to high altitude areas such as Aseer which about 3000 m above sea level. This patient needs to be given oxygen, pain killer, to ask for CBC and LFT and ask for blood cross matching. Now there is no need for immediate blood transfusion still we do not know about hemoglobin level.

74-Answer: D
This girl suffers from hematological disorder as appeared from history and physical examination. Thalasemia major is unlikely due to no organomegally and no history of frequent blood transfusion. G6PD affects males but not females as it is X-linked disorder. Thalasemia minor